THE

Journal of the American Medical Association.

EDITED FOR THE ASSOCIATION BY N. S. DAVIS.

PUBLISHED WEEKLY.

Vol. V. CHICAGO, OCTOBER 31, 1885. No. 18.

ORIGINAL ARTICLES.

THE USE OF THE OPHTHALMOSCOPE IN THE DIAGNOSIS OF BRAIN DISEASE.[1]

BY W. FRANKLIN COLEMAN, M.D., M.R.C.S., ENG.

FORMERLY SURGEON TO THE EYE AND EAR DEPARTMENT OF THE ST. JOHN (CANADA) PUBLIC HOSPITAL, AND PROFESSOR OF DISEASES OF THE EYE AND EAR AT THE BALTIMORE POLYCLINIC AND POST-GRADUATE MEDICAL SCHOOL.

Our knowledge of the physiology and pathology of the central nervous system is so limited, the diagnosis of brain lesions so difficult, the well known conditions of the eye in those lesions so unmentioned or dubiously mentioned by the text-books on medicine, as to afford me some excuse for urging the claims of the ophthalmoscope in the study of the intra-ocular end of a brain nerve, during its structural changes which are connected with intra-cranial disease. As the subject embraces a limited personal experience, I freely admit the testimony of such authorities as Drs. Allbut, Jackson, Gowers, and incidentally many others.

While the nature of many diseases within the chest and abdomen is revealed to touch and the ear, the maladies of that most inaccessible part of the body—the cranium—give out no certain sound, and will not disclose themselves to any wizard touch; so it remained for the genius of von Graefe and Sichel, the patient and skilful labors of Saemisch, Liebreich, Schweigger, Soelberg Wells, Jackson, Allbut, Gowers, and others, to illuminate with the ophthalmoscope the dawning light, through which men were eagerly striving to discover the connection between amblyopia and intra-cranial disease. The popular idea that the oculist has, and perchance needs, no knowledge of general medicine to successfully treat the eye, is no less false than the, I fear, professional belief that the general practitioner can gain little from the ophthalmoscope. With the herculean task of gaining a fair knowledge of the structure, working, derangement, and repair of the general system, it is not to be expected that even a Hercules could also keep abreast of the information and experience in regard to any special organ. Yet, since the whole is made up of all its parts, and the parts are interdependent, and dependent upon the whole, any approach to a comprehension of the whole organic system must involve some familiarity with every part.

[1]Read before the Chicago Pathological Society, Oct. 12, 1885.

No more striking illustration of this can be cited than the evidence of cerebral lesions that may be elicited by an ophthalmoscopic examination of the intra-ocular end of the optic nerve, called the optic disc or papilla. In the pre-ophthalmoscopic period (prior to the great invention of Helmholtz in 1851), there certainly had been *something* done to trace in atrophy of the optic nerve, the connection between amauroris and brain disease, but the ophthalmoscope first revealed an *inflammation* of the optic nerve accompanying brain disease. It frequently happens that patients having symptoms of encephalic disease accompanied by perhaps very considerable optic neuritis, which *mav not* impair vision, have no disposition to consult an oculist, and while so few men in general practice use the ophthalmoscope, one of the most unequivocal signs of encephalic disease, viz.: optic neuritis, is frequently overlooked. The appearance of the optic disc, the first time I succeeded, with the aid of a mirror and lens, in getting a view of it, struck me as resembling a diminutive cream rose full moon, about the size of a large split pea, rising in a pink sky of surrounding choroid, which, by its contrasting color, gave a well-defined sharp border to the disc.

The changes in the optic papilla, produced by cerebral disease, are congestion, inflammation, and atrophy. The congestion of the papilla may be a simple hyperæmia; if attended by œdema, it is the stauungs papilla of von Graefe; the choked disc of Allbut, or, congestion papilla. In optic neuritis, the papilla alone may be affected; in other cases the neuritis occupies the length of the optic nerves, as has been shown in autopsies by Allbut, Gowers, Hulke, Virchow, etc.

Atrophy of the disc may be primary or simple, or consecutive to papillitis. Authorities are in accord as to the great frequency of optic neuritis in intra-cranial disease. Aunuske and Reich collected eighty-eight cases of intra-cranial growths with ophthalmoscopic examinations and autopsies, and found ophthalmic changes in seventy-five per cent. Tumor of brain is nearly always attended by optic neuritis (Hughling-Jackson). Allbut writes: "My own opinion certainly is that changes of a congestive, neuritic, or atrophic character may be found in the discs at some time or other in the course of almost all cases of intra-cranial tumor." "From my own experience (Gowers) I should say that optic neuritis occurs in about four-fifths of the cases of intra-cranial growths." Also, by common consent, the most fre-

quent cause of optic neuritis is intra-cranial tumor, next to it meningitis. Cerebral abscess and softening are occasional causes, and hæmorrhage a very rare one. Encephalic disease may also manifest itself through paresis or paralysis of the ocular muscles—in paretic squint and double vision.

That optic neuritis may possess diagnostic significance of brain lesion, the extra-cranial causes which produce or are associated with neuritis must be borne in mind, such as albuminuria, tobacco, alcohol, and lead poisoning, the exanthemata, suppression of the menses, pernicious anæmia, loss of blood, exhausting diseases, neuralgia of the fifth nerve, tumors in the orbit, and in rare cases secondary syphilis (Nettleship), and "it may occur idiopathically without obvious cause. Hyperæmia is sometimes the expression of a state of congestion and degeneration of the whole optic nerve, but sometimes limited to the disc" (Gowers). It is frequently the first stage of tobacco amblyopia, the last being atrophy.

Choked disc, or hyperæmia with œdema, is the first stage of neuritis, and frequently associated with it. Its principal causes are said to be the same as produce neuritis, viz.: tumors, meningitis and hydrocephalus.

Primary atrophy of the disc is more frequently associated with locomotor ataxia than with any other disease. Often I have seen it occur without assignable cause, and once from a blow on the eye. Galezowski gives a table of 166 cases, embracing the causes of primary and consecutive atrophy:

Cerebral causes	40
Locomotor ataxia	33
Traumatic	22
Alcoholism	13
Syphilis	12
Other causes	46
	166

Allbut is of the opinion that primary atrophy is generally due to mischief at the base of the brain—tumor—or to ventricular dropsy, which may compress or sever the nerves or tracts at some point in their course. From the evidence of numerous observers and my own experience, I believe tobacco in excess will produce atrophy of the discs, though some deny it. To be able to distinguish between a normal and the inception of a pathological appearance of the papilla, much experience is required, and the attempt will soon prove the saying: "Pathology is but the shady side of physiology." A full-blown neuritis may be quite palpable to an amateur ophthalmoscopist; while an expert may with difficulty decide as to a slight hyperæmia of the disc, or say whether pallor is due to incipient atrophy or simple decoloration. *The* indication of hyperæmia is an abnormal redness, which has a tendency to blur the edge of the disc. Comparing the discs may give some help, and noting whether the redness increases from time to time,

The signs of *choked disc* and *neuritis* are similar, and vary with the stage. In the first stage, the disc is slightly swollen and red, the edge, though blurred, may be still distinguished; while in intense papillitis, the color of the disc is so blended with that of the surrounding choroid, that frequently it can only be distinguished as the point of convergence of the retinal vessels, which may be here and there concealed by exudation, and there may be hæmorrhage. Impairment or loss of sight is the chief symptom in optic neuritis, though there may be marked neuritis without any impairment of vision. Pain in the eye is rare; vision usually begins to fail first in one eye, and may fail completely in a few days or decrease very slowly. Restriction of the visual field is common, and color vision is frequently defective. The neuritis of tumor is double, rarely unilateral, and, it appears, is usually a late production, but in many cases in which the cerebral symptoms are latent in the early stage the ophthalmoscope can give valuable help.

Jackson records a case in which a man had had symptoms of cerebral tumor for nine years; during the last three years his discs had been repeatedly examined and found normal; six weeks before death neuritis was discovered. He has pointed out that neuritis often coincides in its onset with an obvious increase in the other symptoms of the cerebral tumor.

The signs of *atrophy* are pallor, and, later, depression of the disc, with shrinking and absence of the capillaries. When the atrophy is marked, there is diminished vision, nearly always more considerable in one eye than the other. There is a concentric irregular marginal limitation of the field of vision. Frequently color-vision is defective.

The *relation* of optic neuritis to intra-cranial disease is still a somewhat vexed question. I shall refer briefly to the principal theories: Von Graafe gave the first in 1859. He distinguished two cases. In one the change in the disc (neuritis) was slight, with a tendency to invade the adjacent retina. In this case there was meningitis at the base of the brain, and inflammation of the optic nerve trunk was found by Virchow, which inflammation was assumed to have been communicated to the optic nerve from the inflamed meninges. This Von Graefe designated descending neuritis. In other cases of considerable swelling, hæmorrhages and vascular distension of the papilla (the stauungs [engorged] papilla or "ascending neuritis" of Von Graefe, the "choked disc" of Allbut, the "papillitis" of Leber), accompanied by cerebral tumor, no signs of inflammation were perceptible on naked eye examination of the trunk of the optic nerve. This engorged papilla he attributed to the tumor which encroached upon the intra-cranial space, and indirectly pressed upon the cavernous sinus, thus obstructing the return of blood from the eye through the ophthalmic vein. This latter theory was much weakened when Sesaman pointed out the extensive anastomosis of the superior ophthalmic with the anterior facial veins, through which the vena centralis retina could empty itself in spite of obliteration of the sinus. A case of Mr. Hutchinson's, in which no distension of the retinal veins was produced, although the sinus was completely obliterated by the pressure of an aneurism, seems quite conclusive against the theory of obstructed blood return from the eye by pressure on the sinus.

The theories of Schmidt and Manz are largely accepted in Germany. Manz showed that fluid distension of the vaginal space around the optic nerve is frequent in neuritis, and believed the distension to be due to subarachnoid fluid which is forced into the vaginal space by intra-cranial tumors, and so forth. Further, he found that injections into the subarachnoid space of animals passed into the optic sheath, and caused fulness of the retinal veins, and in some cases transient redness and swelling of the papilla. Schmidt demonstrated that a colored liquid injected into the sheath, passed into the lymph space of the nerve at the lamina cribrosa, and suggested that neuritis is produced by the irritation of the liquid passing into the lymph spaces.

A theory was put forward by Schmidt in 1860, extended by Hughlings Jackson in 1863, supported by Brown-Sequard, and was formulated by Benedict in 1868. It assumes that the tumor acts as a source of irritation, which has a reflex influence through the vaso-motor nerve upon the optic-disc, leading to its inflammation.

Of these theories, that which accounts for changes in the disc, by inflammation of the meninges propagated along the optic sheath, and finally to the papilla, appears the best supported, by the frequent determination upon post-mortem examinations of the conditions upon which the theory is based. Although neuritis may occur in tumor of any size or kind, in any part of the brain, it is rare in tumor of the convexity, while it is common in basilar growths, and most common when the anterior lobes are involved (Russell Reynolds). Again, meningitis limited to the convexity is *seldom* accompanied by intra-ocular changes, while *basilar* meningitis is *usually* attended by neuritis. In many cases of tumor a local meningitis in the vicinity of the growth, accompanied by inflammation of the optic tract, has been noticed. Now the proximity of this inflammation of the basilar meninges (whether independent, or the result of tumor) to the optic tracts, makes its communication to the tracts highly probable, and the fact of the so common association of inflammation of the meninges and tract increases the probability to a seeming certainty.

Time will not allow more than mention of optic neuritis due to hydatid cysts of the brain; to chronic tubercular basilar meningitis; and traumatic meningitis; to general thickening of the cranial bones, and the consequent narrowing of the optic foramina. We may also refer to simple atrophy of optic nerve caused by pressure of distended third ventricle on the chiasma; and by concussion of the optic nerve and retina; also to cases of optic neuritis accompanied by intra-cranial bruits, several of which have been reported by Dr. Holmes. In one of these cases an autopsy disclosed an aneurism of the internal carotid.

In conclusion, I have selected notes of some hastily reported cases in illustration:

Case 1.—Mary L., aged 20, was admitted under my care into the St. John (Canada) General Public Hospital July 19th, 1878, with both eyes *stone blind.* The blindness of the right eye came on suddenly three weeks previously, and was preceded during the day by severe pain in the brow, which has kept her awake most of the time since. Two days before admission she lost the sight of the left eye in a similar manner to the right. Patient is very nervous, with slight choreic movements of the arms. A year ago had, during three weeks, constant pain in the top of the head, and vomited three to four times daily.

She denies syphilis, but two ulcers on the calf of the leg have all the characters of specific sores. The eyes at rest both look to the left. When the right eye fixes for a near point, the left diverges. There is no perception of light, to which the pupils react very imperfectly.

Diagnosis: White atrophy of both optic discs. Probably cerebral syphilis at the base, involving optic nerves. Treatment: Potass. iod., grs. x; tr. cinchonæ, ℥i, t. i. d.

Aug. 8th.—The right eye sees the position of the window; no light perception with the left. ℞. Hyd. perchlor, gr. $\frac{1}{12}$; ammonia mur., grs. v; tr. nucis vom, m. x, t. i. d. Discontinue potass. iod.

Aug. 20th.—℞. Ung. hydrarg, ℥ss to be rubbed on alternate days into axillæ and thighs. ℞. Pil. hydrarg, grs. ij, t. i. d.

Oct. 12th.—No ptyalism. ℞. Potass. iod., grs. v; sp. am. aromat., ℥i; tr. cinchonæ, ℥i, t. i. d. Stop other medication.

Oct. 22d.—Mouth very sore and marked mercurial fœtor. Discontinue P. I. ℞, Potass. chlor.

November 7th.—Right eye no light perception. Left eye counts fingers at thirteen inches. ℞. Potass. iod., grs. x, t. i. d.

April 9th, 1879.—For the past three and a half months strych. sulph. has been given hypodermically from gr. $\frac{1}{24}$ to gr. $\frac{1}{8}$, then reduced to gr. $\frac{1}{16}$ b. d. Has had tenotomy of the right internal and left external recti muscles. The choreic movements and headache have disappeared Direction of eyes much improved, but they still look slightly to the left. The right eye now distinguishes light, and the left reads No. 200 at twelve feet. Discharged.

Case 2.—J. K. H., æt. 53, admitted into the St. John Hospital July 5, 1881. He is a muscular looking man, four feet ten inches high, and weighs about 130 pounds. During the past year he has had a very dizzy head, and would fall any day, but would soon be able to rise again and walk on. The fall was always preceded by giddiness. Six months ago he began to vomit about every second day, and soon after vomited every morning, if he laid in bed until 7 o'clock. When he rose earlier the vomiting did not come on. This continued up to last week; since then the vomiting has completely ceased. During the past month has had a pretty severe pain from the forehead to the back of the head, lasting an hour or two daily, and he could not see to read. Memory failing for past year. Pulse 68, small and rather weak; skin, normal temperature to touch; appetite good; bowels costive; sleeps well; whistles feebly; grasp of hands weak; flexion of fore-arms and legs strong; gait so unsteady he seems in constant danger of falling; patellar reflex normal; no lightning pains; pupils dilated by atropine; right ear hears the

watch only within half an inch; ordinarily loud voice at ten feet; left ear hears the watch only in contact, or ordinary voice at four feet; speech broken, Dutch-English, probably normal; vision, right eye counts fingers at two feet, left eye counts fingers at twelve feet; urine normal. Ophthalmoscopic examination shows intense double optic neuritis, with hæmorrhages, and infiltration of retina and discs. There is probably tumor of the cerebellum involving the tubercula quadrigemina.

June 25th.—The left pupil a little small, reacts imperfectly to light. Right pupil half the size of left, reacts very imperfectly; percussion on the temples hurts a little, on the forehead less; head twenty-four inches in circumference.

July 15th.—Last evening and this morning refused to take his medicine, saying there was something in it to poison him.

July 24th.—Discharged at his own request.

Case 3.—Sarah B., æt. 36, single, admitted into St. John Hospital February 9, 1881. First noticed two months ago that the left eye could not see daylight. Three days ago the right eye failed so much as to be unable to read ordinary type. Three years since was confined to bed for six weeks with constant, severe pain in the top of the head. Was at times very chilly and again very hot and thirsty. The head was very hot. No vomiting. This pain was finally much relieved by the application of iced-water to the head, but has been very severe most of the time since, up to the preseut. Memory is failing, and she feels stupid. Pulse eighty, weak; sleeps very badly; appetite poor; no history of syphilis; mother and one brother died of phthisis. With right eye can count fingers within six inches. The left has no perception of light. The fundus of the right eye normal in appearance. Advanced optic atrophy of the left. The atrophy probably neuritic, and the result of meningitis.

March 26th.—Has been treated with potass. iod., potass. brom., and hydrarg perchlor. and cold water to the shaved head. Right disc normal in appearance. Discharged relieved of pain, but vision about the same as upon entering Returned to the hospital on August 17, 1881, with headache and nausea. The sight of the right eye began, three weeks ago, to get worse, and she cannot now distinguish light with either eye. Pupils large and immovable. There is now atrophy of the right optic disc. as well as of the left. Pulse 104, small and weak. ℞. Hydrarg. submur., gr. ⅙ every hour.

Aug. 20th—Severe pain in the head continues. ℞. Potass. iod., grs. x, t. i. d.

Aug. 22d.—No pain in the head. A prominence noticed over the left frontal eminence (osteoma).

Oct. 27th.—Discharged with perception of light with right eye only, the head-ache absent for several weeks, and the frontal prominence much reduced.

Remarks.—The prompt relief of the head-ache and the frontal prominence by potass. iod. points to a specific origin of the atrophy of optic discs in spite of the absence of a syphilitic history.

Case 4.—Concussion of the brain, and probably of the retinæ, followed by atrophy of the discs. Rev. D. B. consulted me Oct. 5th, 1883. Last April was thrown backwards from a buggy, striking the ground with the back of his head. After recovering in a few minutes from insensibility, felt nausea. The injury did not confine him to the house. Since then has had a feeling of pressure on the front of the head, and sometimes behind the eyes. Every few nights is sleepless and has tinnitus aurium, "rain-like sounds." The sight began to fail a few days after the accident, and in a fortnight he was unable to read. Has photopsies. Vision, right or left eye, $\frac{1}{10}$. Blueish white atrophy of both discs. ℞. Strych. sulph., gr. $\frac{1}{48}$ t. i. d. ℞. Potass. brom., grs. xv and repeat p. r. n. in evening. The patient was not again heard from.

No. 70 East Monroe St.

A CASE OF SPINAL ATAXIA WITHOUT LOSS OF SENSATION AND WITH INCREASED PATELLAR-TENDON REFLEX. A CONTRIBUTION TO THE STUDY OF SPINAL ATAXY.[1]

BY MORTON PRINCE, M.D.

PHYSICIAN FOR NERVOUS DISEASES, OUT-PATIENT DEPARTMENT, BOSTON CITY HOSPITAL; AND AT THE BOSTON DISPENSARY.

The case of ataxia which I am about to describe is one of exceptional interest and especially so when studied in connection with Dr. Smith's very interesting series of cases of hereditary ataxia, with which it has many points of similarity. It resembles hereditary ataxia in the age of the patient (15 years) at which the symptoms developed, the absence of anæsthesia and in fact of all sensory disturbances, the presence of anterior curvature of the spine and nystagmus, and the rapidity with which the symptoms developed. It differs on the other hand from this form of ataxia in the facts, of the freedom, thus far, of the rest of the family from the disease, and in the presence and indeed exaggeration of the patellar-tendon reflex. It differs again from ordinary tabes in this last particular, in the presence of nystagmus, in the absence of all sensory disturbances of every kind, of all cerebral, ocular (pareses) and bladder symptoms. It may be a question as to where it should be placed, and indeed the presence of the tendon-reflex might be thought to exclude it entirely as tabes, but still I am strongly inclined to believe, for reasons which I shall presently state, that it belongs to the systemic spinal ataxias. Another and not the least interesting point connected with the case is the bearing which it has on the disputed question of the pathology of ataxia. There is still a difference of opinion existing among neurologists as to the cause of ataxia. Some holding that it depends purely upon the loss of sensation, (including sense of touch, muscular sense, etc.); others that it is a purely motor disturbance due to an impairment of the motor coördinating impulses. The sensory theory would be disproved if, as Erb has pointed out on the one hand, cases of complete anæsthesia should be discovered in which no ataxia existed, and on the other if well-marked ataxia should

[1]Exhibited before the Section for Clinical Medical Pathology and Hygiene of the Suffolk District Medical Society, June 9, 1885.

be found with no loss of sensation. A few cases of this latter class have already been reported, and one in particular by Erb,[2] which will be mentioned more in detail later. In this case there was also complete absence of anæsthesia in every form, while the tendon reflexes were present. These cases show that though loss of sensory impulses may possibly by themselves induce the loss of the power of coördinating movements, ataxia must also have a motor origin and probably be due to a disturbance of the motor coördinating tracts. The complete overthrow of the sensory theory would be accomplished by the occurrence of a case of total anæsthesia without ataxia.

Mary D., 17 years of age on September 23, 1885. Her present illness is dated by her mother from January 3, 1884, when the girl came home from school complaining of weakness of the legs and malaise. She has never been to school since. The mother admits, however, that during the preceding two months, the daughter had not felt well, and complained of weakness. I first saw the patient in the early summer of 1884, and have examined her occasionally from time to time since. As her symptoms have remained, with the exception of one or two particulars, essentially the same during all this time her present condition will be here given, stating at the same time such changes as have occurred in the progress of the disease.

Gait, muscular power, etc. The patient can hardly walk or stand without the aid of support. She habitually uses crutches, and only can be made to walk unassisted after persuasion, when left to herself she easily topples over though she can manage to get across the room. It is evident that she has not the typical ataxic gait, but rather scuffs along with her feet, taking short, slow, careful steps. She gives at first the impression of having advanced paresis of the legs. But further examination showed this view to be erroneous; for when supported laterally so that she cannot fall, she can lower or raise herself on either leg. When told to flex and extend her legs against resistance, it is manifest that their muscular strength is good, though I think they are not as strong as normal. When, again, lateral support is given to her by placing the hands firmly against both her sides, and her courage is restored, she can raise her feet and walk fairly naturally. When walking, or when standing with her heels and her toes together but eyes open, she topples over after a few seconds and must be well balanced to stand at all. With her eyes closed she tumbles somewhat more readily. She stands and walks with her feet wide apart. She does not reel, or pitch in one direction more than another, but rather tumbles like any inanimate thing which has lost its equilibrium. In other words there exists *static ataxia*,

There also exists incoördination of the motion of the legs, but in a minor degree. When told to describe a circle on the floor with the toe, a most irregular figure results. She cannot accurately touch with the toe any small object, but reaches it by moderately zig-zag movements. It is a question whether more of an ataxic gait would not be shown if she could maintain the equilibrium, and could walk with less caution and more quickly. The left leg is more ataxic than the right. The hands are also ataxic; the left decidedly, the right slightly. This is shown by difficulty in picking up small objects, buttoning her clothes, touching the top of her nose with her eyes shut.

Sensation. There is absolutely no loss of the senses of touch, pain, or temperature. When I first saw her, about fourteen months ago, I thought there was slight diminution of the muscular sense, not very marked, but still sufficient to be detected. I am unable, however, to discover any at all. She recognizes the slightest passive move of her legs, can accurately locate their position, and can feel the slightest faradic contraction of the muscles. Sensation as tested by faradism is also normal. There have been no lightning pains or girdle sensations. When first seen in 1884, she said she had a slight feeling of numbness in legs, but this has disappeared. At that time there was no objective anæsthesia.

Reflexes.—The patellar-tendon reflexes are not only present, but exaggerated. No ankle clonus; the plantar reflexes can only with difficulty be obtained. The lumbar reflexes are lively.

Muscles.—There is no atrophy or rigidity. There is no disturbance of the functions of bladder or bowel, no tremor or local paralysis, excepting the possible weakness of legs above mentioned.

Nystagmus exists when the eyes are turned to right and left, but none noticeable when the eyes are at rest. Last June I did not notice the nystagmus, and do not think it was present at that time. I saw it for the first time at the next examination in September.

There exists marked anterior *curvature of the spine* in upper dorsal region. There have been no psychical symptoms of any kind. No vomiting, headach, vertigo (excepting slight dizziness when she attempts difficult feats, and loses her balance.

The *eyes* were kindly examined for me by Dr. Charles F. Williams in June last, and within a few days by Dr. O. F. Wadsworth. Both report nothing abnormal in the fundus of either eye. As Dr. Williams did not observe the nystagmus, there is additional ground for not believing it to be present in June.

There is no syphilitic history, and no neurosis in the parents or collateral branches can be discovered. Up to date, there have been eight children in the family. The youngest is at time of writing only five days old, and one died in infancy. Of the other six children, I have personally examined four and found all but the subject of this paper healthy. The mother describes the remaining two free from all disease.

As Mary D., first complained of weakness in November or December of 1883, she was little more than 15 years old when the first symptoms developed.

That the diagnosis in this case is not placed beyond doubt, must be frankly admitted. But, it seems to me that it is highly improbable that the case is one of cerebellar disease, in view of the character of the drug, and of the absence of all headache, vertigo, vomiting, convulsive attacks, and the normal condition of the eyes.

Of the spinal diseases, the only ones to be thought of are multiple sclerosis and Friedreich's disease.

[2] Neurologisches Centralbl. No. 2, 1885.

On first seeing the case, I was inclined to regard it as one of the multiple sclerosis because of the lively patellar-reflex; but now, after watching the case for nearly a year and a half, I believe the lesion will prove to be that of Friedreich's disease. This view is based on the absence of the peculiar tremor of multiple sclerosis, the absence of ankle clonus, local paralysis (especially of the ocular muscles), and of spastic rigidity of the muscles; the absence of all cerebral symptoms, as vertigo, headache, psychical disturbances, etc. Furthermore, it is as difficult to explain the increased patellar reflex by a multiple sclerosis as by a posterior sclerosis; for any lesion of the lumbar enlargement which would cause the ataxia, would abolish the reflex, and if the lumbar enlargement is not involved, the increased reflex is compatible with a posterior sclerosis. This will be referred to again in speaking of the pathology of the disease.

It may be well to recall here the features which distinguish Friedreich's disease from ordinary tabes.[1] In the first place, there is the tendency to attack many members of the same generation, in the same family, while ordinary tabes does not run in families. Then Friedreich's disease attacks early in life, while ordinary tabes is a disease of middle age or of later life. Out of thirty-six cases, in fifteen the first symptoms came on at 10 years of age or under, and thirty-two were 20 or under.

In ordinary tabes, pain and anæsthesia are prominent and almost constant symptoms; in Friedreich's form, disturbances of sensibility are usually insignificant, come on late in the disease, and often are entirely absent. Other peculiarities of the latter form, are the rapid extension of the ataxy from the feet to the hands, impaired articulation, nystagmus, and curvature of the spine. On the other hand, many symptoms which are common in typical tabes are absent in the hereditary variety,—such as lightning pains, anæsthesia, disturbances of the bladder, transient paralysis, loss of pupillary reflex, optic atrophy, visceral lines, etc. (Omerod). In both, the patellar-reflex is absent. It will be noticed that the symptoms in Mary D's case present a typical picture of the hereditary form, excepting that none of her brothers or sisters have thus far been attacked (all are younger than the patient), and the patellar-reflex is present and rather exaggerated.

There is the youth of the patient, the rapid progress of the ataxia spreading to the arms within six months, the nystagmus, the spinal curvature, and the absence of the other symptoms commonly met with in ordinary tabes. Difficult articulation we should hardly expect to meet at this early stage of the disease. The fact that no other case has thus far occured in the same family, will hardly militate against this case being regarded as Friedreich's form of tabes, considering the ages of the other children, and also the fact that a case has already been recorded which stood alone in the family. The absence of sensory disturbances is peculiar to this form of tabes.

As to the retention of the patellar-tendon reflex, it is a significant fact that it is not a very rare thing in ordinary tabes for the patellar-reflex to be preserved, and two cases[2] have been observed, one by Ross and one by Erb, in which the patellar-tendon reflex was increased. But more than this, the clinical evidence in favor of regarding the case of Mary D., as one of Friedreich's ataxia, (posterior sclerosis), is still further strengthened by three observed cases of ataxia in one, of which *normal sensation* was combined with *normal patellar-reflex*, and in the other two with *exaggerated patellar-reflex*. These cases are so valuable that it will not be out of place to briefly mention them here. The first case is reported by Erb.[3] It was that of a man 52 years of age, who, when he came under Erb's care, exhibited marked and typical ataxia. When he walked side by side with a patient, with typical tabes, no difference in the gait could be distinguished. There had been no lightning pains; there was no paræsthesia or anæsthesia of any kind and no girdle pains; the pupils and ocular muscles were normal, there were no bladder symptoms. There were also no cerebral symptoms of any kind. The patellar-tendon reflexes were present. For the same reasons I have given above in the case of Mary D., Erb regarded this case as one of spinal ataxia, though unwilling to commit himself as to the exact lesion of the cord.

This seems to be the place, before giving the other two cases, to speak of Kast's[3] two cases, in which with slight anæsthesia and no loss of muscular sense at all, there was exquisite ataxia, while the patellar-tendon reflex was present.

The first of these cases was one of myelitis from compression following fracture of the vertebræ caused by a fall. There was complete paraplegia, slight loss of sensation, but gradual motor recovery in eight weeks. When full motor power in the legs had returned, ataxia was developed. Both knee-jerks were readily obtained, but there was no ankle clonus. The plantar reflexes were active. In the right leg ataxia and loss of sensibility to touch and pain were more marked than in the left, but there was no loss of muscular sense; the sphincters were not affected.

The second case was one of acute transverse myelitis, with complete motor and almost complete paralysis of both legs to touch, temperature and pain. In this case also, on return of motor power, decided ataxia developed, and persisted even after complete return of motor power. The knee-jerk was well marked and there was ankle clonus on left side but not on the right.

In these two cases, a stage intervened between the complete motor paralysis and return of muscular power, in which, with almost complete motor power, there were considerable defects of coördination and ataxia. I have not been able to obtain Kast's original article, and therefore cannot speak positively of the exact amount of sensory disturbances present, but Erb, referring to them, says: "There was the most exquisite ataxy, without very marked disturbance of sensibility, and especially without any loss of the muscular sense."[4]

[1] A very excellent digest with a table of all the cases up to date is given by Omerod in Brain, Vol. vii, page 105.

[1] Ross, Diseases of the Nervous System.
[2] Neurolog. Centralbl. No. 2, 1885.
[3] Schmidt's Jachrbücher, 1883. B. 200, Brain, Vol. vii, p. 553.
[4] Neurolog. Centralbl. No. 2, 1885.

The two cases above referred to, wherein normal sensation was combined with increased patellar-reflex, were reported by Seeligmüller[1] as cases of Freidreich's disease. They were two brothers whose parents were first cousins, and whose mother and maternal aunt were highly neurotic. Both brothers had locomotor and static ataxy, in one the static being predominant. In both there was absolutely no loss of sensation, and there existed *increased* patellar-reflex, and nystagmus. The plantar reflex was absent in both; the abdominal reflexes were present. There was no ankle clonus, and no disturbance of speech.

Freidreich, to whom Seeligmüller sent his cases for an opinion, expressed a doubt as to whether they were true cases of his disease, presumably in view of the presence of retained patellar-reflex and the presence of psychical symptoms which existed in both, namely: forgetfulness and dreamy states in one, and forgetfulness, migraime, dreaminess, and inverted sexual passions in the other. But, as Seeligmüller points out, the father, who was otherwise perfectly well, had the same forgetfulness, and, as Omerod remarks, the connection between tabes and paralysis of the insane is well known. Even if there should have been some cerebral disease, it would scarcely account for the spinal symptoms. It seems to me, all things considered, that Seeligmüller was more likely right.

Not the least interesting question connected with the case of Mary D. is the seat of the lesions in the cord. It is a remarkable fact, considering the grouping of the symptoms, that out of seven autopsies[2] of Freidrich's disease thus far recorded[3] (including the case reported by Kahler and Pick), in six there was found sclerosis, not only of the posterior columns, but of the lateral as well. In several there was sclerosis of anterior columns. Of these seven cases, the condition of the tendon-reflexes was, unfortunately, noted in only three; in all three the patellar-reflex was absent, though there was lateral sclerosis as well.

How are we to explain the absence of all symptoms of lateral sclerosis in these cases on one hand, and, on the other hand, of the presence of the knee-jerk in exceptional cases of ordinary tabes, and of the exaggerated jerk in Seeligmüller's cases and mine? The key to this question I believe is given by the autopsies of other cases of systemic spinal disease, not Freidreich's, in which a combination of systemic lateral and posterior sclerosis existed. An excellent digest[4] of these cases has also been made by Omerod, who has collected twenty cases in all. Of these, the patellar-reflex was lost in eight and exaggerated in six cases, reported by Strümpell (two cases), Westphal (one case), Raymond (one case), Rabasin (one case), and Déjérene one case. Of these, the most instructive was Déjérene's.[5] The symptoms were those of tabes, namely: slight locomotor but marked static ataxy; *exaggeration of patellar-reflex; ankle clonus;* paresis of legs; anæsthesia and analgesia of the legs, distributed in patches. Death from broncho-pneumonia. At the autopsy there was found chronic posterior spinal meningitis, atrophy of posterior nerve roots and cutaneous nerves, sclerosis of lateral columns in lumbar and dorsal regions. This sclerosis was wedge-shaped, the bone reaching the periphery and occupying the posterior part of the lateral columns, but stopped before reaching the posterior bone (wrist cerebellar and crossed pyramidal tract?). The posterior columns were sclerosed the whole length, *excepting in the lumbar enlargement*, which was nearly unaffected.

In the other four cases, all of which, however, presented more decided spastic symptoms, the disease of the posterior columns did not reach the lumbar enlargement. These cases, therefore, support Westphal's opinion, based on his one case where the spastic symptoms were present, and several other cases where they were not—that if the posterior sclerosis involved the lumbar enlargement, the lateral sclerosis was manifested by paresis only, without rigidity, and the patellar-reflex is absent, but if the posterior sclerosis did not extend into the lumbar enlargement, the symptoms of lateral sclerosis predominate.[1]

If the case of Mary D. (the subject of this paper), is properly classified as one of Freidreich's disease, we may assume that the disease has not to any great extent involved the lumbar enlargement; and thus explain the fact that the patellar-reflex is not abolished. Finally, the exaggeration of the latter may be owing to the same conditions which cause an increased patellar-reflex in transverse myelitis when the lesion is above the lumbar enlargement; or, if we suppose the same anatomical changes to be present which were found in the six autopsies of Freidreich's disease mentioned above, it is possible that the lateral columns are slightly affected. This would account for whatever amount of paresis is present.

[1] Archiv. für Psychiat., etc. Bd. 10, S. 222.
[2] This does not include Dr. Smith's case.
[3] Abstracts of this article will be found in Omerod's Digest.
[4] Brain, July, 1885.
[5] Archiv. de Physiolog., Nov. 16, 1884.

SUN-BLINDNESS.[2]

BY C. F. SINCLAIR, M.D.,

SURGEON TO THE ILLINOIS CHARITABLE EYE AND EAR INFIRMARY.

The danger of blindness from the direct rays of the sun, which appears to have been generally recognized not only by the medical profession but also by the laity of the past generation, is apparently unrecognized to-day. During the recent eclipse, many might have been seen looking at it with the naked eye. It is not uncommon for patients to tell the physician, as a proof of strong vision, that they can look steadily at bright lights, and even at the sun without blinking. Children not infrequently undertake competitive trials to see which can gaze longest and most steadily at the sun.

In many of the recent smaller works on ophthalmology the subject of sun-blindness is not mentioned. Nettleship, Lawson, Williams, Schweiger and De Wecker refer to the possibility of blindness being caused by flashes of lightning, by the bright glare

[1] Omerod, loc. cit.
[2] Read before the Chicago Society of Ophthalmology and Otology, August 11, 1885.

from snow and from a too prolonged gaze at a brilliant artificial light; but the possibility of a like result following from the direct rays of the sun is not referred to. Soelberg Wells mentions the subject, but in the most cursory manner, simply saying that blindness may follow if the eye is long exposed to bright sunlight. He further points out the difference which may exist in the density of the cloud or disk, and which may last only a few moments, days or weeks, or even longer. The prognosis, in his view, appears to be favorable. No reference is made to any pathological condition. The treatment recommended is rest, protection from bright light by suitable colored glasses, cod-liver oil and steel. The majority of recent writers, however, have ignored this as a cause of blindness—a cause which, from the carelessness of adults and the ignorance of children, may well be considered one which is most practical and vital.

In a more recent work by Swanzey, of Dublin, the subject is considered at somewhat greater length. He refers to the semi-blind spot which appears in the field of vision after exposure, and which, however, may be absolute. In his experience, even in mild cases, this cloud seldom entirely disappears. The ophthalmoscope shows a small bright white spot at the fovea centralis, surrounded by a blood-red ring which fades off into the normal color.

A recent monograph by Deutchmann, of Göttingen, gives us more definite information as to the pathological conditions in these cases. His investigations were undertaken more particularly with that end in view. He cites four cases which came under his care in 1882. In one of these a blue glass had been used in looking at the eclipse, still, the result was the same. In all the cases, immediately after looking at the sun a small cloud appeared in the centre of the field of vision, and examination showed a small central scotoma. Vision was impaired in the same degree in three of the cases, being $\frac{20}{50}$. In one case which came under observation two months after the first appearance of the blind spot, vision had already considerably improved, seeing $\frac{20}{30}$ without difficulty. The finest print, in all these cases, was read with difficulty. In none of Deutchmann's cases were the scotomata complete, and yet in none was perfect vision recovered. Pathological changes were found in all, viz.: a small bright white spot in the centre of the macula lutea, and around this a blood-red ring which gradually shaded off into the normal retina.

To verify these results, Deutchmann undertook a series of experiments on the eyes of rabbits. The direct rays of the sun were condensed by a concave mirror and then rendered parallel by a convex lens. They were then directed on to the retina through the dilated pupil. The resulting appearances were similar to those seen in the human eye; the small central spot of anæmia with the surrounding ring of hyperæmia—these results following an exposure of only a few seconds' duration. An examination with the microscope showed that an extremely small area of the retina was disorganized by "the coagulation of the albumen in its tissues with hyperæmia, exudation, diapedesis of blood-corpuscles and pigment disturbance surrounding it."

Based upon these pathological changes, the unfavorable prognosis which Deutchmann gives in these cases would seem to be well justified. The following case, however, which came under my observation the 28th of last March, presents phenomena difficult of explanation if we accept the view that these pathological changes are an essential element in sun-blindness.

Howard D., a lad 13 years of age, looked at the sun several times during the eclipse of last March. Finally, after a somewhat prolonged gaze, he felt slightly dazzled. Then, wherever he looked, objects seemed colored with quickly alternating shades of green and blue. This lasted half an hour, and then disappeared. His vision continued good until 4 P. M. of the same day, when, looking at the snow or sky, he noticed a dark spot in the centre of the visual field. The spot was quite dark and about eight inches in diameter. It was round with a piece taken off the outer side—this piece representing the position of the moon when the eclipse was last observed. It appeared as if the sun had photographed itself upon the retina. Three days later, a dull ache was felt in and around the eyes.

I first saw the patient twelve days after the accident had occurred. He then told me that the cloud had been constantly growing larger and darker. Vision, on this first examination, was $\frac{7}{10}$ in both eyes. The ophthalmoscope showed no discoverable morbid change in the fundus. The disk, the vessels and the retina all appeared in normal condition.

Subcutaneous injections of strychnia, together with the use of the constant current, were begun. The beneficial effects of this treatment were seen four days later, when the cloud had become less dark and impenetrable, and the outlines of letters representing normal vision, or $\frac{10}{10}$, could be made out within its area. Still four days later, the patient returned to school and attempted to go on with his studies. This resulted in a relapse to $\frac{7}{10}$ vision and an increase in size and density of the scotoma, with a return of the dull aching pain in the eye. April 9, $\frac{10}{10}$ vision was again reached, but the letters could only be deciphered separately after closing and resting the eyes.

April 14.—$\frac{10}{10}$ could be seen clearly for 3″.

By April 21, in the R. E., 12″ were counted before the cloud came, and even then $\frac{10}{10}$ could be read through it. In the L. E., 6″ elapsed before the cloud developed, and through it $\frac{10}{10}$ could be seen only indistinctly.

April 28, a week later, 20″ in the R. E., and 10″ in the left, indicated a continued improvement.

May 4, the strength of the retina had increased to 28″ in the R. E., and at the end of that time, what the patient described as a simple blur came, and $\frac{10}{10}$ could be easily read through it.

May 13.—The R. E. had reached 43″ and the L. E. 25″, and only the upper half of the test-types was obscure. At this time, owing to considerable swelling and soreness over the temples, the injections of strychnia were suspended, when the strength of

the affected portion of retina rapidly deteriorated to 32″ in the R. E. and 15″ in the left. The subcutaneous injections were again commenced, with an improvement in four days of 11″ in the R. E. and 22″ in the left. This improvement was gradual until June 2, when 66″ in the R. E. and 46″ in the left were counted before the development of the scotoma, which at the same time had diminished much in size and density. At this time the patient withdrew from treatment.

The fact that this case, after several exposures, presented no discoverable pathological changes, together with the constant improvement until 66″ was reached, during which time no evidences of the scotoma were manifest, justify the conclusion that in these cases of sun-blindness the lesion may be much less serious than that indicated by Deutchmann—being rather of the nature of a paralysis than that of the disorganization of the retinal elements, and, consequently, that the prognosis as to the ultimate recovery of perfect vision is not necessarily unfavorable.

MEDICAL PROGRESS.

MATERIA MEDICA AND THERAPEUTICS.

HYDROBROMATE OF HYOSCIN.—DR. ARCHIBALD CHURCH, of Elgin, Ill., in a short article on this subject, says that in sthenic acute conditions, or violent manifestations arising in the course of chronic insanity, hydrobromate of hyoscin has notably and promptly lessened the excitement, and in the frenzy of melancholia has mitigated the outbreak in cases where it has been tried in this hospital. While not doubting that its continued administration in small and often repeated doses will disarrange alimentation—and what powerful drug does not?—it has yet rendered signal service in tolerably full doses, $\frac{1}{40}$ grain, given when specially indicated, without producing any untoward symptoms whatever. By watching its action upon others, and upon myself, in varying doses, it did not seem advisable to give it in a more routine manner than one does morphia or atropia in parallel cases, and, so far, more than two doses of $\frac{1}{40}$ grain have not been used in twenty-four hours.

By careful sphygmographic observations it is clearly shown that minute doses—$\frac{1}{150}$ to $\frac{1}{100}$ grain—of the hydrobromate are stimulant of cardiac action, and thereby of the mental processes and attendant manifestations, not only among the insane, but in a condition of health. With a larger dose—$\frac{1}{40}$ to $\frac{1}{20}$ grain—this also is the primary result, but as more of the medicament comes into operation, it is followed by a slowing of the pulse-rate and by a diminution of the cardiac curve of the tracing, sometimes to such an extent that a bruit of dicrotism appears. A feeling of fatigue, or rather of comfortable weariness, if you will permit such a term, is now associated, and one gives up readily to feelings of drowsiness, sleep following naturally. After using the drug in $\frac{1}{40}$ grain doses for from six to ten consecutive nights, witn an average of six hours' sleep, for instance, its discontinuance has been followed, but only after several nights, by wakefulness, which again gave way to the remedy. In some instances of confirmed insomnia, or rather of often-disturbed sleep, after securing a few nights' good rest the patient has rested fairly well, the habit of waking at certain times being broken, and in general the effect of the drug is lasting. When given by the mouth, as was pointed out in the article above referred to, its action is slow, and there is considerable variability as to the amount required by different patients. Although no notable depression has come under observation from the use of the drug in such doses as are indicated above, it no doubt is capable of producing stupor just as does hyoscyamia, which doubtless in the amorphous form contains it largely, but which is associated with little danger, according to a recent writer in the London *Lancet*, who gave unhesitatingly ½ grain, and even ¾ grain of Merck's preparation, producing coma, etc.

It may be not uninteresting to note that hyoscin is a very active mydriatic. It was found that two drops of a solution $\frac{1}{10}$ grain to the ounce of distilled water produced complete dilatation of the pupil and paralysis of the accommodatory muscles in about five minutes, and that it was more active to stretch the adhesions in a case of posterior synechia than the repeated instillation of a solution of atropia sulphatis three grains to the ounce. The mydriasis so produced is very persistent, lasting from five to ten days, and the use of the solution is not attended, as far as observed, with any conjunctival irritation, which will suggest its value to oculists where the long-continued action of a mydriatic is required.

From the little learned concerning the drug, it would seem to be of use in conditions of intensified nerve action, especially of cerebral origin, to meet acute manifestations.—*Med. Record*, Oct. 10, 1885.

MEDICINE.

HYDATID CYSTS OF THE BASE OF THE SKULL.—M. ODILLE reports the following interesting case which came under the care of M. Bucquoy: A man, 43 years of age, had been subject for three years to intense cephalalgia, which was constant and extended all over the head. He did not vomit, and had never had convulsions. At times there were lancinating pains down the side of the face. For two years there had been some feebleness of vision and deafness on the left side. Two months before entering the hospital he noticed a tumor on the left side of the neck, and which increased steadily in size. Some weeks later he expectorated something very much like raisin seed, a dozen of these being expectorated in one morning. He then entered the hospital, and the nature of the tumor was established beyond doubt; it was an hydatid tumor, starting from the base of the skull, making a track for itself in the soft tissues of the neck, and pressing on the cranial nerves in the vicinity. There was almost complete prolapsus of the upper eye-lid, and paralysis of the external and inferior recti of the left eye. There was dimness of vision on the same side. The muscles of the face were somewhat retracted, the contracture of the left masseter giving rise to some open-

ing of the mouth. There was anæsthesia of the left side of the face, and of the buccal and nasal mucous membranes. There was no trophic trouble.

The tumor continued to grow, and took on a somewhat phlegmonous appearance. It was opened, and a small quantity of pus and a large number of hydatid vesicles escaped. Other vesicles were removed at intervals, after which the wound cicatrized. The motor troubles persisted, but the sensibility was restored completely on the left side of the face.

M. Odille refers to the rarity of hydatid cysts of the base of the skull, to the absence of definite symptoms other than those of other tumors of that region, save in the cases in which vesicles are expelled by the nasal fossæ after the appearance of the tumor at the surface. He thinks that an exploratory puncture is indicated whenever an hydatid tumor is made out in the temporal or mastoid regions.—*Thèse de Paris*, No. 377, 1884.

EXTRACT OF WILD CHERRY BARK AND CHLOROFORM INHALATION IN STRYCHNINE POISONING.—DR. GEORGE M. KOBER, U. S. A., reports a case of strychnine poisoning in a Chinaman. The symptoms were well pronounced, and after washing out the stomach he administered a tablespoonful of the extract of wild cherry bark, and repeated the dose in twenty minutes; the tetanic paroxysms diminished in frequency and force, and were readily controlled by the inhalation of chloroform. The alarming symptoms in the case lasted, however, nearly two hours, yet there was evidence of progressive improvement, and the immediate effect of the wild cherry pointed to an antagonistic action. After the expiration of two hours, the only remaining symptoms observed were involuntary twitches and a feeling of stiffness in the muscles, for which potass. bromide and chloral were given with good effect; fifteen grains of the former and ten grains of the latter soon induced rest and sleep for a few hours. The patient recovered perfectly in two days, complaining only of being tired during this time.

His reason for not publishing the case before, was the insufficient evidence of the fact that the extract of wild cherry bark proved absolutely antagonistic to the action of strychnine. The stomach had been thoroughly evacuated, the quantity of the poison introduced was unknown, and the effects of chloroform inhalation cannot be overlooked.

He has seen in recent years no authority of weight for the use of hydrocyanic acid in strychnine poisoning, but the subject is sufficiently important to experiment on animals and thus determine whether the extract of wild cherry bark possesses advantages over prussic acid.—*Medical News*, Sept. 26, 1885.

THE RELATIONS BETWEEN DISEASES OF THE ABDOMEN AND THOSE OF THE RIGHT HEART.—Since the work of Potain in 1878, and the researches of Tessier and Franck in 1879 and 1880, this question has received little attention. Passerini now cites three cases of tricuspid insufficiency consecutive to a peritoneal effusion. Auscultation showed a prolongation of the first sound and a murmur; the second sound being found strengthened toward the pulmonary orifice. The disappearance of the effusion was accompanied by the disappearance of these sounds. Passerini believes the cause of these cardiac alterations to be purely mechanical; the compression of the addominal viscera provokes venous anæmia, and engorgement and hyperæmia of the thoracic organs. In favor of this explanation we have the observations of Larcher and of Depaul in pregnancy. These writers have noted the accentuation of the first sound toward the pulmonary orifice, at the same time that it is prolonged at the level of the base of the xyphoid cartilage. The same observation has been made in two cases of ovarian cyst, and in another of large abdominal tumors; and finally, this same modification of the first sound at the pulmonary orifice can be produced by simple compression of the abdominal wall.—*Revue Bibliog. des Scien. Méd.*, July 31, 1885.—*Medical Record*, October 10, 1885.

TWO CASES OF HERPES WITH MOTOR PARALYSIS.—DR. G. WALLER communicates to the *Weekblad* of Amsterdam, notes of two cases of herpes, in which motor nerves were affected. A widow-woman, aged 68, had a painful patch of herpes, covering the whole of the right side of the face, stopping abruptly at the middle line. After some weeks, the herpetic spots and the pain disappeared, being, however, replaced by paralysis of the same side of the face, with loss of taste on the right half of the tongue. The other case was that of an old man, who had a herpetic eruption situated on the anterior aspect of the upper arm on the right side; this was accompanied with severe itching and a pricking sensation. Eight days after the appearance of the eruption, he found himself unable to raise or extend the arm. There was no pain or swelling in the muscles or joints, and the electrical reactions were normal. The herpes and the paralysis both indicated the circumflex and musculo-cutaneous as being the nerves affected. The treatment was electrical, and brought the case to a successful termination.—*Brit. Med. Jour.*, Sept. 19, 1885.

RECOVERY FROM LEPRA TUBEROSA.—At the recent meeting of the Medical Congress at Wiesbaden, P. G. UNNA, of Hamburg, reported the case of a woman, 38 years of age, a native of Germany, who had lived fifteen years in Brazil, and had acquired a case of leprosy in an unknown manner. It was a pure case of lepra tuberosa, without anæsthesia, extending over the face, arms, legs, and a portion of the trunk. She was under treatment in Unna's clinic for four months, and at the end of that time she was cured. She was treated with pyrogallol, resorcin, chrysarobin, and sulph-ichthyolate (?) of ammonia. A concentrated ointment (10 per cent.) of chrysarobin and resorcin acted very well against the nodules, the ichthyol only feebly, while the pyrogallol caused the formation of vesicles. During the last three weeks of her stay in the clinic the treatment was mainly directed towards removing the pigmentation and the cutaneous deformity, which was done by a plaster of mercury, carbolic and salicylic acids. —*Gazzetta degli Ospitali*, October 7, 1885.

THE
Journal of the American Medical Association.
PUBLISHED WEEKLY.

THE EDITOR OF THIS JOURNAL would be glad to receive any items of general interest in regard to local events, or matters that it is desirable to call to the attention of the profession. Letters written for publication or containing items of information should be accompanied by the writer's full name and address, although not necessarily to be published. All communications in regard to editorial work should be addressed to the Editor.

SUBSCRIPTION PRICE, INCLUDING POSTAGE.

PER ANNUM, IN ADVANCE.....$5.00
SINGLE COPIES.....10 CENTS.

Subscriptions may begin at any time. The safest mode of remittance is by bank check or postal money order, drawn to the order of the undersigned. When neither is accessible, remittances may be made at the risk of the publishers, by forwarding in REGISTERED letters.

Address
JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION,
No. 65 RANDOLPH STREET,
CHICAGO, ILLINOIS.

SATURDAY, OCTOBER 31, 1885.

THE REDUCTION OF SUPERABUNDANT FAT.

In this country the ceaseless activity of both brawn and brain and the nervous temperament of the people, together perhaps with certain climatic influences, are antagonistic to the accumulation of superfluous fat. In Germany, on the contrary, and to a minor extent in England, where the conditions of life are less wearing, a tendency to corpulence is not uncommon. The people are phlegmatic, and although their struggle for existence is more severe, perhaps, owing to fewer possibilities, it is not characterized by that spirit of haste and rush which in the United States makes life an exhausting race. The habitual consumption of large quantities of malt liquors in Germany is also of influence, doubtless, in the production of adipose tissue. It is not strange, therefore, that the reduction of superabundant fat should have first received scientific consideration in Great Britain and Germany, and that in the latter country at the present time the safest and most efficient methods for its accomplishment are being earnestly discussed.

The principle underlying the various anti-fat treatments is to limit the diet almost exclusively to nitrogenous food, while at the same time sedentary habits are exchanged for a life of exercise in the open air. Although agreeing in principle, the various systems now in use differ as to the proportion between the nitrogenous and non-nitrogenous food allowed. Before mentioning these differences, however, it may be well to state briefly the rationale of this treatment and the dangers to be avoided. With reference thereto we shall transcribe the remarks of Dr. J. Munck from an article by him in the *Berliner klinische Wochenschrift*, No. 13, 1885. Experiments, made to ascertain the metabolic changes which take place in the nitrogenous elements of the animal organism, have taught that the metamorphosis of the albuminous tissues depends, aside from the amount of albumen consumed, upon the condition of the body as respects fat. That is to say, the greater the amount of adipose tissue, the less is the quantity of nitrogenous food required to maintain an equilibrium in the metabolism of its albuminous elements, or in other words, to keep repair *pari passu* with waste. If, therefore, more albumen be furnished than is required to maintain this balance, it is stored up in the system and the blood is enriched greatly to the benefit of anæmic conditions.

On the other hand, if the non-nitrogenous food be reduced until the nitrogenous can no longer hold tissue-waste in check, the needs of the system are met by the consumption of the stored up fat. In consequence, therefore, of the absorption of the adipose tissue, the amount of albumen, which once supplied the requirements of the body, no longer suffices and it should be somewhat increased. So also should be the quantity of the hydrocarbons, else the consumption of the body's fat will be too great and react deleteriously upon the general nutrition. Hence, the danger in attempting to reduce obesity by restricting the dietary to one that is chiefly nitrogenous, lies in following it out too long as a routine. It is only suitable to the first few weeks. It may be further stated, that as respects their ability to limit the destructive metamorphosis of the nitrogenous elements of the body, sugars and starches exert an effect equal to that of corresponding amounts of fat, whereas, in checking the consumption of the adipose tissue, one part of the latter in the food is equivalent to two and four-tenths parts of the former.

With the foregoing facts as a basis, the proper proportion of the ingredients of the dietary must now be determined; and here, as will be seen, the various methods depart quite widely. Chambers appears to have inaugerated the regiminal treatment of obesity in 1850, by excluding all fat from the diet and restricting the amyloid articles. He also limited the consumption of liquids. In 1863, Dancel announced his method, according to which bread, potatoes, beans, other vegetables and fruit, in all to the amount of 500 grammes were allowed in addition to plenty of meat, also fluids from 500 to 1250 grammes. These were soon eclipsed, however, by the Banting system, announced in 1864. This dietary consisted of 500 grammes of lean meat, 80 of toast, 50 to 100 of fresh fruit, a small quantity of vegetables excepting potatoes, tea without milk and sugar, and four to

seven glasses of strong wine; equivalent to 170 grammes of dried albumen, ten of fat and eighty of sugar and starch. Upon this diet Mr. Banting lost about thirty-five pounds (sixteen kilos) of his weight in nine months, and reduced his girth about half a yard. The results of this system, which by the way had been suggested by Dr. Harvey, were so brilliant as to make it widely popular. It was soon found, nevertheless, to have serious drawbacks. The allowance of albumen was so out of proportion to the hydrocarbons that individuals who adhered to it closely, speedily complained of general malaise, nervous excitability and sleeplessness, while the consumption of so much meat set up an obstinate catarrh of the stomach and duodenum, as well as other dyspeptic disturbances. To obviate these dangers, Dr. Ebstein adopted a regimen composed of 100 grammes of albumen, 85 of fat and 50 of amyloid food together with 1750 of fluids. His daily bill of fare comprises 300 grammes of meat with rich gravy or rich soup, 80 grammes of buttered toast, a few vegetables with fruit morning and afternoon, and tea without milk and sugar. This dietary certainly accomplishes its purpose, but Munck thinks is not wholly devoid of some of the dangers of the Banting system. Voit, of Munich, again advises a daily regimen containing 118 grammes of albumen, 40 of fat and 150 of sugar and starch, and thus differs very materially from Ebstein.

Finally, Oertel, also of Munich, has recently come forward with still another proportion between the albumen, fat and amyloids. As was mentioned in a previous editorial article, Oertel's plan is varied according to conditions of the circulatory apparatus. In one group corpulence is associated with healthy heart and blood vessels, in the other, the heart has undergone fatty degeneration and the hydrostatic equilibrium is lost. In the first class the object is merely to reduce the fat, while in the second this is to be united with the therapeutic management of the case. In the one, vigorous exercise is enjoined and enough carbon must be supplied to stimulate the bodily energy. In the other, effort is made to build up the atrophic muscles by giving enough albumen to favor its accumulation; that is, its transfer into the nitrogenous elements of the organs.

The hygienic management of these cases has been previously detailed and need not be repeated. For the majority of cases, Oertel recommends a small cup of coffee, with milk and sugar, morning and afternoon, and with the morning coffee 35 to 70 grammes of white bread with butter; at noon no soup, but 200 grammes of beef, 50 grammes of lettuce or the like, and 100 of fresh fruit; for supper, some caviar, two eggs, 150 grammes of meat and 150 to 200 grammes of light white wine. Later, when a portion of the bodily fat has disappeared and the circulatory disturbance is relieved, the daily dietary may be increased by adding 100 grammes each of fish and pudding to the dinner, as well as 200 of wine, and to the evening meal some cheese and bread. Nevertheless, this increased allowance is only admissable when by hearty exercise, preferably mountain climbing, the consumption of carbon is augmented and the system requires more nourishment. In conclusion it may be said that Oertel's daily regimen consists of 155 to 170 grammes of albumen, 24 to 40 of fat, 70 to 110 of sugar and starch, and 900 to 1300 of fluids.

SPORT VERSUS SCIENCE.

"The red deer intended for sport with her Majesty's staghounds during the ensuing hunting season were captured yesterday in Windsor Great Park. By noon a score of splendidly antlered stags had been run into the paddock. The gates were closed and stout nets placed across the meadow, round which the deer were driven several times until they had entangled themselves in the meshes and rolled over and over in their efforts to escape from the toils. They were secured by the park laborers, and, having been denuded of their horns, were pushed into wooden boxes and conveyed in farm-carts to Swinley Paddocks. Forest hunting will now be commenced by the Queen's buck-hounds, which during this month are expected to meet Tuesdays and Fridays at the Royal Hotel, Ascot. The pack is under the control of the Marquis of Waterford."—*London Standard*, Oct. 6, 1885.—*Chicago Tribune.*

Sir Joseph Fayrer asserts that in India 20,000 human beings die annually from snake-bite; but as yet no antidote to the snake-poison has been discovered. But when Dr. Lauder Brunton began a series of experiments to isolate the poison, find out its nature, and search intelligently for its antidote, his work was stopped by the antivivisection laws of England. And with a consistency that is peculiarly charming, the British Government, whose own laws prevent such work in its own country for the benefit of its own subjects, has furnished cobra-poison to Drs. Weir Mitchell and Reichert, of Philadelphia, in order that they might make the experiments in America which Dr. Lauder Brunton was forbidden to make in England. So also, when but recently Sir Joseph Lister, the promulgator of the new science of sur-

gery, wished to make some experiments on animals to further perfect surgical methods, he was compelled to leave enlightened England and pursue his studies in "revolutionary France."

In England to-day it is a crime to kill or even to use a mouse in the interests of humanity. The mouse may be poisoned, or it may be turned over to a terrier to be tortured to death, and nothing is thought of it. Hunter's experiment on a deer would be a crime in England to-day, unless the experimenter could obtain a license, which would very likely be refused; such an experiment was, and would be, in the interests of humanity. But England's Queen has a score of "splendidly antlered stags" run into a paddock, captured, denuded of their horns, and properly prepared for the "sport with her Majesty's staghounds during the ensuing hunting season."

"Forest-hunting will now be commenced by the Queen's buck-hounds, which during this month are expected to meet Tuesdays and Fridays at the Royal Hotel, Ascot. The pack is under the control of the Marquis of Waterford." Now look on this hypothetical picture: "Experiments on rabbits will soon be commenced by Dr. T. Lauder Brunton in order to find a physiological antidote to the cobra-poison, and thus put a stop to the holocaust in India. The rabbits will be under the personal supervision of Dr. Brunton and his assistant." If this were the case, who would be the greater friend to humanity, England's Queen or Dr. Brunton? the Marquis of Waterford or Dr. Brunton's assistant? Yet, had the *London Standard* contained this announcement in the same column with the twaddle quoted at the beginning of this article, the "*Humane Societies*" of England would have raised such a cry that Her Majesty's Government would have seen to it that Dr. Brunton's "cruel experiments" were stopped. Australia, under the English Government, has been recently overrun by rabbits, and they are there destroyed in every possible manner. They may be poisoned, trapped and killed, as the red deer recently captured in Windsor Park, shot, or hunted with dogs—it matters not how they are tortured or killed, so they are not used for a scientific or humane purpose.

These things show an amount of ignorance, inconsistency, and indifference to humanity that would be ludicrous were they not so terrible in their results. Professor Yeo estimates, from the reports of vivisectionists, that of 100 experiments on animals seventy-five are absolutely painless, twenty as painful as vaccination, four as painful as the healing of a wound, and only *one* as painful as a surgical operation. It does not need the estimate of a professor to show that of twenty deer hunted and caught by dogs, *twenty* will suffer as much as from a surgical operation. Does the fact that this useless slaughter of deer is for the amusement of the ruler of a great nation, and the further fact that the instruments of torture are under the control of a Marquis, make it probable that the animals will suffer less? Are the sufferings of animals less acute when the hunter wears a red coat and blows a horn than when the experimenter wears a laboratory apron and administers an anæsthetic? Does the highly intellectual amusement afforded by seeing an animal torn by dogs outweigh the benefits, to science and humanity, gained by experimenting on an anæsthetized animal—or even one which feels every prick of a needle? Perhaps we are to believe that the unnecessary giving of pain for sport is not cruelty, while a practically painless experiment or a necessarily painful operation for solid scientific results is cruelty!

PNEUMONIA; ITS FATALITY—EXAGGERATED STATEMENTS.

In the issue of the JOURNAL for October 10, 1885, was an article entitled "Thoughts on Some Points Connected with Pneumonia," in the introductory part of which there were some statements that attracted our attention. For instance, on page 393 the writer says: "Our predecessors for many long years viewed pneumonia as simply inflammation of lung tissue, and the spoliative treatment adopted by them was in keeping with those views. . . . . If pneumonia be simply inflammation of lung tissue, and, *vice versa*, inflammation of the lung be pneumonia, certainly it should be treated antiphlogistically, just as it was treated fifty years ago; by blood-letting, purging, and a general depressant course. But the *frightful mortality* attending this treatment is a fearful commentary upon it. . . . . The fatality attending this antiphlogistic treatment was simply appalling. . . . . And so it continued until J. Hughes Bennet called a halt, and adopted a conservative, expectant and supporting treatment, since which time the mortality has been reduced 250 to 500 per cent."

These statements of the writer are doubtless made in perfect sincerity, but they are good specimens of the too common habit of speaking of the practices and opinions of preceding generations in terms of unlimited exaggeration. Indeed, it is not rare that a writer or speaker presents the exceptional extravagancies and vagaries of the few in any past period as the rule of action or opinion in the age to which they belong. And in relation to no subject is this more true than in regard to what our writer calls the "spoli-

ative" or antiphlogistic treatment of pneumonia. If he were to set about the task of furnishing proof of the "frightful" and "appalling" mortality of the former period to which he refers, and of the "250 to 500 per cent." reduction of that mortality in the present time, he would probably find it a far more difficult and perplexing one than he imagines.

Perhaps the very latest treatise on croupous pneumonia from an authoritative source is the chapter on that subject in the third volume of the "System of Medicine by American Authors" just published, written by Alfred L. Loomis, Professor of Practice of Medicine in the University of New York. Under the head of *Prognosis*, Dr. Loomis, after citing the ratio of mortality as reported by numerous recent writers, as derived from the hospitals of cities, the camps of armies and from private practice, sums up the result as follows: "The mortality-average from all the published reports to which I have had access, gives 20.1 per cent. of deaths." And he adds, "from such facts it must be admitted that a disease in which death occurs in one out of every five cases should be classed among the very fatal diseases. But the death-rate varied very much at different times; *it is to-day the same as when Andral wrote, nearly fifty years ago.* He stated that it varied from 33 to 2 per cent." It will be observed that the *fifty* years ago, when Andral wrote, was just the period when our contributor, Dr. Hart, says the mortality was so *frightful and appalling* from the "blood-letting, purging" and other antiphlogistic measures then in vogue. Yet his mortality results, instead of being from 250 to 500 per cent. greater, are actually a little less than those obtained by Dr. Loomis since J. Hughes Bennett called his "halt." The highest rate of mortality mentioned by Andral was 33 per cent., while of 255 cases treated by Dr. Loomis in his wards of the Bellevue Hospital during four years 87, or 34 per cent, died. During the great war in this country from 1861 ,to 1865, of 61,-202 cases of pneumonia reported as occuring among the white troops, 14,738 or a little more than 24 per cent. died. During the same period there occurred among the colored troops 16,133 cases, with a reported mortality of 33 per cent., or one in every three cases. On the other hand, Sir J. MacGregor states that of 4027 cases occurring among the troops in Spain, during the war with Napoleon, more than fifty years ago, 285 died, or only one in fourteen. And the report adds, that they were treated "energetically," etc.

Our sole object in calling attention to this subject, is to guard the younger portion of our readers against the adoption of such exaggerated ideas of the evil effects of former methods of treatment as compared with those popular at the present time, without first critically examining the literature of the past, as well as that of the present, concerning any given topic under consideration.

SOCIETY PROCEEDINGS.

AMERICAN GYNECOLOGICAL SOCIETY.

Tenth Annual Session, held at Washington, Sept. 22, 23, and 24, 1885.

(Concluded from page 468.)

SECOND DAY—AFTERNOON SESSION.

In the discussion of Dr. Reamy's paper, DR. H. P. C. WILSON said that all agree that the perineum should be supported, but there is a great variety as to the way in which this support should be made. Dr. Reamy's method appears to be very practical, and it has the advantage of leaving the operator free to watch the case.

DR. MANN thought the method of Dr. Reamy a good one in a certain proportion of cases, but he was sure that he had seen some cases where it would have been of no avail. The worst ruptures that he had seen had occurred in cases where, at the acme of the expulsive pain, the woman has torn herself from the accoucheur. In such cases, the use of chloroform would of course obviate the difficulty. Another objection to the method is that it requires more assistance than can always be secured.

DR. JOSEPH TABER JOHNSON had made a few investigations in regard to the necessity of supporting the perineum at all, and he had found that perhaps more lacerations of the perineum occur in the practice of physicians who support the perineum, than in the practice of midwives who do not support the perineum.

DR. CHADWICK thought the term "supporting the perineum" a misnomer. What is meant is retardation of the child's head, until the tissues can be sufficiently stretched to permit the passage of the head. He does not permit the head to escape during a pain. The method which he employs is to have the patient on her side, and then pass one arm over the thigh, and by interlocking the fingers, he could make any desired amount of pressure. The head is held back until the perineum is sufficiently stretched.

DR. ELLWOOD WILSON, of Philadelphia, had tried all the methods that had been suggested for the support of the perineum, with the exception of the one described by Dr. Reamy. His usual plan is simply to instruct the woman to keep her mouth open during a pain.

DR. REAMY, in replying to the statement of Dr. Chadwick that supporting the perineum was a misnomer, said that the word support means protection or succor, and he used it in this sense. The number of assistants required had been objected to, but the importance of preventing rupture of the perineum in the first labor is so great that even if two or three

skilled assistants were required, they should be employed. With this method the patient cannot get away. An objection to the method referred to by Dr. Chadwick is that the pressure is not made over the perineum, but over the head, and in the efforts to retard the head extension may be produced, causing the delivery of the head in a bad relation to the axis of the outlet. The method mentioned obviates this. By this method, the head can be retarded as much as may be desired. He called attention to a clinical picture familiar to all, in which the head has been permitted to remain pressing on the perineum for from half an hour to two or three hours, until the perineum is stretched to the degree described in the paper. The tissues are then in a state of beginning necrosis and exceedingly friable. Even in such a case, the use of the towel or bandage lessens the perils of the perineum, and it will often be saved where otherwise it would have been torn. It cannot be supported by the hand under such circumstances. If it be desired, the forceps may be applied with the bandage in position.

Dr. E. W. Jenks reported

A CASE OF CÆSAREAN SECTION.

He described the following case, which he had seen in consultation: "The patient, aged 27, had given birth to one child five years previously without special difficulty; two years later, she received a fracture of the ilium from a building falling on her. She was taken in labor at three o'clock in the morning. The physician in attendance, finding some difficulty, tried to apply the forceps. He got one blade on without difficulty, but could not, after several trials, introduce the second blade. He sent for assistance, and the attempt to apply the forceps was again made without success. The cause of difficulty was a projecting shelf of bone at the seat of fracture. Another physician was called in, and the forceps were again tried. It was then decided to perform craniotomy, which was done, but still the head could not be made to descend. Dr. Jenks was then sent for. He tried to apply the forceps to make sure that they could not be applied, and failing, tried the cephalotribe with no better success. It was then decided to perform abdominal section. This was performed at two o'clock that night, twenty-four hours after labor began. The woman appeared to be in good condition. The incision was made through the abdominal wall and the uterus opened. The placenta was attached directly under the incision, and there was alarming hæmorrhage, which, however, was quickly checked by the rapid delivery of the fœtus. The edges of the uterine incision were brought together by silk sutures, and the abdominal wound closed. The patient did well until three days after the operation, when she suddenly died. It was subsequently learned that the nurse had, in disobedience to orders, temporarily left the room, and in her absence the patient got out of bed. She complained of feeling something give way and experienced severe pain, and died in a few hours.

Dr. A. J. C. Skene, of Brooklyn, thought that in such cases the chances of the patient are lessened by undue efforts at delivery by the forceps. He thought that this would have been a good case for the performance of laparo-elytrotomy. It is impossible to sacrifice the child by that operation if it is performed in good time. He could hardly imagine any case in which craniotomy should be performed, except, possibly, where the head is so engaged in a small inferior strait that it can be delivered in no other way. Even then, he was not certain that the Cæsarean section would not be the best operation.

Dr. Jenks said that the operation of laparo-elytrotomy was discussed, but it did not seem to be an easy operation under the circumstances. If it had not been for the unfortunate accident in this case, he thought that the woman would have recovered.

Dr. Ellwood Wilson, of Philadelphia, read a paper on

THE USE OF TARNIER'S FORCEPS.

Dr. Wilson had, at the meeting in 1881, read a paper in which he offered a number of objections to the use of these forceps. His objections had been based on theoretical grounds. The object of the present communication was to report nine cases in which he had used the forceps with decided advantage to the patient. He had therefore modified his views. A detailed account of the nine cases in which the forceps had been used was then given. The instrument used had been Dr. Howard's modification of Tarnier's forceps.

Dr. Neale, of Baltimore, exhibited his modification of the Tarnier forceps, which consisted in adapting the Tarnier principle to the Simpson forceps.

Dr. M. D. Mann had used the Tarnier forceps for the past two years in a number of cases, with satisfactory results in the main. In one case of deformed pelvis in which the Tarnier forceps were applied, the child was finally delivered and the woman made a good recovery. The child was, however, injured by the forceps. The outer edge of the orbit had been crushed in, destroying the eye. The child was living at the time of birth, but subsequently died.

The President said that so far as he knew, he was the first one to use the Tarnier forceps successfully in America. In cases of occipito-posterior positions he thought that the application of other forceps interfered with the rotation of the head, but with the Tarnier forceps the head is free to rotate.

Evening Session.

At the business meeting, the following were elected

OFFICERS FOR THE ENSUING YEAR

President, Dr. Thad. Reamy, Cincinnati.

Vice-Presidents, Dr. Theophilus Parvin, of Philadelphia, and Dr. George J. Engelmann, of St. Louis.

Secretary, Dr. Joseph Taber Johnson, Washington, D. C.

Treasurer, Dr. Matthew D. Mann, Buffalo.

Other members of the Council, Drs. Frank P. Foster, B. B. Browne, J. C. Reeve, and R. B. Maury.

New members were elected as follows: "Dr. J. B. Hunter, New York, Dr. Charles Jewett, Brooklyn, and Dr. W. H. Parrish, Philadelphia.

The next meeting will be held at Baltimore, Md., September 21, 22, and 23, 1886.

THURSDAY, SEPTEMBER 24—THIRD DAY.

DR. R. STANSBURY SUTTON, of Pittsburg, read a paper on

A MODIFICATION OF EMMET'S CERVIX OPERATION IN CERTAIN CASES, WITH A CASE.

He said that while the operation was original as far as he was concerned, he did not claim to be the only one who had performed it. Cicatricial tissue is found to a greater or less extent in every lacerated cervix which has lasted for any length of time. This is especially apt to be the case where nitrate of sllver has been used in the treatment of the cervix. The hardened tissue may be present in both lips, or it may be limited to one lip.

The case reported was operated on June 5, 1885. She was the mother of several children. There was a double laceration of the cervix. The tissue of the anterior lip was hardened and hypertrophied, and the lip was convex from side to side and also from before backward, so that by the ordinary method of operation correct coaptation could not be effected. The tissue of the anterior lip was as hard as cartilage. Ordinary denudation of the posterior lip was sufficient, and this was made, leaving the strip of mucous membrane somewhat wider than usual. The cicatricial mass involving the anterior lip was removed from border to border, completely denuding this portion of the cervix. The parts were then brought together in the usual way, and the result was excellent. The cervical caual readily admits a sound, and the woman menstruates without difficulty. He thought that there were cases in which nothing short of the complete removal of the cicatricial tissue will be sufficient.

DR. WM. GOODELL remarked that he had resorted to this device on more than one occasion. He had done another thing on a few occasions, that is, outlined the strip of mucous membrane to be left and dissected it from the tissues below, leaving it united at its base. The indurated tissue was removed and the flaps brought together. The result was good.

DR. SKENE objected to the term cicatricial tissue as incorrect. This was not cicatricial tissue, but a true sclerosis, a hypertrophied, indurated tissue. Much could be done to get rid of this tissue by preparatory treatment. But this often requires too much time, and then such an operation as that proposed by Dr. Sutton was of service. His own plan is to remove a transverse wedge-shaped piece out of one or both lips of the cervix, as the case required, and then bring the surfaces together with silk stitches. After the first day, the patient can go about, and the sutures are removed in the course of a week or ten days. After the size of the cervix is reduced he performs the ordinary operation. He had done both operations at one sitting, but preferred to do them separately. One objection to the method of Dr. Sutton was that it leaves cicatricial tissue.

DR. G. J. ENGELMANN had seen the condition referred to, very constantly. In old and severe cases, it is impossible to retain the strip of mucous membrane. He had at times entirely denuded both lips, and on some occasions had complete union, but the passage of a probe served to keep a canal open. For the last few years, he has paid no attention whatsoever to this central strip. A single piece of the carbolized silk thread with which the opening was closed, was inserted to keep the canal patulous. A probe passed a few times after the removal of the sutures will dilate the opening. The result of this operation has been good. The union, the involution, and the restoration of the health of the patient have been perfect. This operation has been done only in severe cases, and as far as he knew, none of these patients had conceived.

DR. M. D. MANN had tried the method described by Dr. Sutton. In only one case was it necessary to denude both surfaces. To keep a patulous canal, he introduced a piece of small drainage tube. The case did well.

DR. BAKER considered the retention of the mucous membrane as important. He thought that the method of Dr. Sutton, by leaving cicatricial tissue on one side of the canal, will tend to make the canal tortuous. As a rule, if the patient is properly prepared, it will not be necessary to remove this hypertrophied tissue. If this is not done, Emmet's operation can still be performed in the way described by Dr. Skene. Dr. Baker prefers to do both operations at the same time. It is then not necessary to introduce a suture to bring the edges of the transverse incision together. Great care should be exercised in the introduction of substances between the two flaps.

The PRESIDENT said that a few weeks before the death of Dr. Sims he had seen Dr. Harry Sims perform this operation in the presence of his father. He inserted a glass tube that fitted so loosely that it had to be retained with a plug of cotton.

DR. SKENE thought that if denudation was practiced on both sides, stenosis would certainly follow.

DR. WILLIAM GOODELL, of Philadelphia, read a paper on

INFLAMMATION OF THE PAROTID GLANDS, FOLLOWING OPERATIONS ON THE FEMALE GENITAL ORGANS.

He first referred to the close relation existing between the salivary organs and the genital organs of the adult, as shown in mumps and other conditions. Parotid bubo seems particularly liable to follow ovariotomy, where septicæmia has taken place. He had seen parotid bubo once in 173 cases of ovariotomies. This was in a greatly emaciated woman from whom a tumor weighing eighty pounds was removed. The patient had been twice tapped, once six weeks before the operation. The second tapping was followed by septic poison, and the operation was performed as a last resort. The patient did well until the ninth day, when the left parotid gland began to swell. It suppurated and was opened. The patient finally died on the twenty-second day after the operation.

There is a transference of irritation to the parotid glands in which there is no evidence of septic poisoning. Of this the author had seen three instances; twice after ovariotomy and once after oöphorectomy. In these cases the parotid complication did not influence the progress of the case. Not one of these

ended fatally. He regarded the affection of the glands as sympathetic and not symptomatic.

Within a short time he had operated on a lacerated cervix. The operation was followed by free hæmorrhage, and in the second week the parotid glands began to swell. This was succeeded by hysterical trismus, which lasted for some time. The patient recovered.

Dr. Sutton stated that out of twelve ovariotomies he had lost one patient, and she died with the complication referred to in the paper. The case did well until convalescence was reached, when one parotid gland began to swell. This was followed by swelling of the other gland. The temperature varied one or two degrees from the normal. There was slight diarrhœa, no tympany, and no soreness. A number of rose-colored spots were found about the second week, over the abdomen and arm. In the third week she became much worse. The glands diminished in size, but the temperature ran up and she died. He regarded the cases as septicæmic. Others who saw the case considered it a well marked case of typhoid fever.

Dr. J. T. Johnson had seen this complication in one case of ovariotomy. On the third or fourth day swelling of the parotid appeared. There were the rose-colored spots referred to by Dr. Sutton. There was some fever, and the patient died on the sixth day.

Dr. Mann wished to put on record three cases which he had seen. The first was a case of ovariotomy. There were distinct symptoms of septicæmia, and the patient died before the glands suppurated. The second case was one in which he had removed all the uterus above the internal os, and also the ovaries. At the end of the first week one gland became swollen. There was little fever. The patient made a good recovery. The third case was a boy who had received a penetrating wound of the abdomen. Enlargement of the glands followed, but he made a good recovery.

Dr. Emmet added two cases of inflammation of the parotid glands. Once it followed an operation for lacerated cervix, the patient recovering. Once it followed an operation on a small vesico-vaginal fistula, the patient dying. This is the only time he had seen death follow this operation.

Dr. Baker had seen the complication follow Tait's operation, the patient recovering.

Dr. Reamy had met with two cases. One was after Tait's operation. The glands did not suppurate, but the patient died the seventh day after the operation. The second was a case of supra-vaginal hysterectomy, in which the uterus and both ovaries were removed. The left gland became much enlarged, but did not suppurate. The patient recovered.

Dr. James R. Chadwick, of Boston, read a paper on

PERISTALSIS OF THE GENITAL TRACT, AND A NEW THEORY TO EXPLAIN RELAXATION OF THE VAGINAL OUTLET DURING LABOR.

Some time ago he was called to see a primapara in labor. He found the os slightly dilated and the vaginal outlet quite rigid. Returning two hours later, the outlet was much relaxed, although the head had not escaped from the uterus. On another occasion a woman with a bleeding fibroid tumor consulted him. The examination revealed quite a small outlet. Ergot was given to check the bleeding. Later the patient returned and the outlet was found much relaxed. This had occurred coincident with the occurrence of uterine contractions and the forcing down of the tumor. Further investigation of this subject has led him to the conclusion that there is peristaltis action of the lower portion of the genital canal as well as of the fallopian tubes, and that it is to this that the relaxation of the outlet is largely due.

Dr. Goodell referred to a fact which seemed to bear out this idea, when after labor or abortion, a piece of membrane or placenta is retained, the cavity of the cervix is found funnel-shaped, showing that the uterus is trying to force out the retained substance.

Dr. Theophilus Parvin, of Philadelphia, reported a case of

FACIAL PARALYSIS IN THE INFANT FROM THE USE OF THE OBSTETRIC FORCEPS.

The following case was described: A well proportioned woman, aged 30 years, had been in labor thirty-two hours, the first stage lasting twenty-four hours. The only difficulty appeared to be want of strength in the uterine contractions. The forceps were therefore applied and the child delivered. The following day it was observed that one side of the face was paralyzed. This was especially noticeable when the child cried. There was no evidence of bruising from the forceps. The paralysis disappeared in ten days without treatment.

Dr. Ellwood Wilson had seen such cases, and in every instance the paralysis had been on the right side. This was attributed to the predominence of the left occipito anterior and the right occipito posterior positions. Under such circumstances, one blade of the forceps would make pressure on the nerve.

Dr. Skene said that the differential diagnosis between facial paralysis from injury and facial paralysis from apoplexy is of importance, for apoplexy is not uncommon in new-born children. Usually the diagnosis is readily made, but difficulty occurs in cases in which there is facial paralysis from injury associated with paralysis of the arm caused by violence in delivery. He had seen such a case in consultation. In this case it was of great importance to complete the labor quickly, and the shoulder had been injured in delivery, so that there was facial paralysis and paralysis of the arm on the same side. At first there was no trace of contusion, but in a short time ecchymosis appeared and a favorable prognosis was given, which was verified.

Dr. Richardson remarked in most cases that he had seen the paralysis has been on the right side. Once it resulted from the pressure of a bony tumor of the pelvis. He had seen it where the forceps were applied to the after-coming head.

The following papers were read by title:

The Genu-Pectoral Posture in the Prolonged Nausea and Vomiting of Pregnancy, with cases, by Dr. H. F. Campbell, of Augusta, Ga.; and *A Study of an Unusual Type of Puerperal Fever*, by Dr. Fordyce Barker, of New York.

A resolution expressing the sympathy of the Society with ex-President Dr. Albert H. Smith, in his sickness, was offered and adopted.

The officers for the ensuing year were then installed, and the Society adjourned.

CHICAGO MEDICAL SOCIETY.

Stated Meeting, Oct. 5, 1885.

(*Continued from page 470.*)

DR. AUGUSTUS V. PARK read a paper on

LAPAROTOMY IN A CASE OF GUN-SHOT WOUND OF THE INTESTINES.

He said: M. S., a butcher-boy, aged 16, of slight build, formerly in poor but lately in good health, was shot on September 1st, 1885, at 3:30 P. M. A pistol ball of calibre 22, fired from a distance of forty-five feet, entered the abdomen at a point midway between the symphysis pubis and umbilicus, two inches to the left of the median line. The patient was removed in a farmer's spring wagon from the place where he was shot to his home, a distance of seven miles. A dressing was applied, and at 1 P. M., the next day, he was taken to the Michael Reese Hospital. The patient arrived nearly exhausted; his temperature was 100° F., pulse 130, weak and intermitting. His respirations were thirty, his abdomen tympanitic especially high on left side. There was no liver dullness, giving rise to a theory that the liver was crowded upward by extravasated blood. At 1:30 P. M., laparotomy was performed, the incision being made directly over the seat of the wound. We could not find any wound of the peritoneum, or where the ball passed through it. As the peritoneum was opened, decomposed blood rushed through the opening with great force. Blood and blood-clots which quickly formed were removed with sponges; the intestines were drawn out and examined for wounds. The first wound found was an abrasion, the ball not having entered the intestine. There was but little hæmorrhage, and the wound was closed by the interrupted cat-gut suture. The second wound, half-inch in diameter, opened directly into the intestine. A small mesenteric artery was found divided and tried. All hæmorrhage ceased. The wound was closed by interrupted suture; no further injury could be detected. The abdominal cavity was cleansed with a one per cent. solution of carbolic acid; the intestines were washed, carefully examined and returned. The abdominal incision was closed by two sets of sutures, the peritoneal surfaces were approximated and closed by continuous suture.

A 5:30 on the morning after the operation the patient died. Seven hours later an autopsy revealed commencing peritonitis, the small intestines being apparently agglutinated together. A few blood clots and a quantity of extravasated blood were found in the peritoneal cavity on the left side. A contused wound of the rectum was found near the sigmoid flexure, the ball being deflected from this position into the muscular tissue below, where it was found imbedded. This case justifies the opinion of various eminent surgeons that we cannot tell the direction the bullet takes from the position of the wound of entrance, or exit. From the conditions existing in this case, he was of the opinion the case would have terminated favorably had he been able to perform, with antiseptic precautions, laparotomy immediately after the injury.

DR. F. E. WAXHAM said that Dr. Park was entitled to a great deal of credit for presenting his paper and the specimen, because it is the report of a case which terminated unfavorably. He thought the chances of the patient would have been better if he had been allowed more quiet. His frequent removals must have loosened the blood clots and increased the hæmorrhage and prolonged the shock. If he had recovered he would have thought it almost miraculous, for it is one of the maxims of abdominal surgery to have complete and perfect quietude for the patient.

DR. R. TILLEY said the study of gun-shot wounds of the abdomen is interesting to every member of the profession, no matter in what particular direction his favorite studies may lead. Any one of us may find ourselves confronted with the responsibility associated with such cases when delay in action may be culpable. Relative to the case before us, he should not only not consider a recovery miraculous, but deem the conditions associated with it more favorable than, on the average, can be expected. One of the conclusions formulated by our President before the American Medical Association in Washington in 1884 is, in opening the abdomen to look for gun-shot wounds, the incision should be in the median line, regardless of the bullet wound. This procedure certainly facilitates efficient inspection, but in the present case it was ignored. He regretted that the cause of failure of the operation has not been thrown into stronger relief, and he felt like asking the President, Dr. C. T. Parkes, to formulate the lessons he would draw from the failure of this operation. Of course, the case will go on record as one of operation after gun-shot wound of the abdomen associated with failure, and will tend to develop hesitation in the mind of the general practitioner about a class of cases which in his opinion, called for urgent, prompt operating.

DR. R. G. BOGUE said there were a few lessons to be learned from this case. One is the advantage which would follow an early operation, before the blood or fluid in the abdominal cavity decomposes. An operation should be made before the irritation from this source is severe. Another lesson is the necessity of a thorough exploration of the abdominal cavity for the purpose of discovering and removing any foreign substance which may be in it. It is necessary to control hæmorrhage, by opening the abdomen and having free access to every part of it.

DR. J. H. ETHERIDGE said that it will be noticed the pulse-rate was high after the operation, which lasted two hours. The question arises, if we cannot

account for death on the opinion that it was due to the action of the ether on the cardiac nervous system. Was there acute poisoning from ether? Or was death caused by septicæmia? He wished to thank Dr. Park for the report of this case, because it is from the reporting of these unsuccessful cases we obtain the most benefit. He did not believe it would deter any one from doing abdominal surgery, as it had already taken such a rank that the report of one unsuccessful case would not intimidate any surgeon, but enable him to steer clear of difficulties others may have encountered.

The PRESIDENT said that he felt somewhat diffident about making any remarks, because his experience in connection with gun-shot wounds of the abdomen was solely in connection with the results of experiments upon the lower animals. "There is one fact demonstrated by this case, and it stands out in all the cases, of which I know, operated upon in man, which corroborates the results of the experiments made by myself, and that is, the necessity of free incision through the median line of the abdomen, without any reference to the course of the bullet, as the best way to get at the injury so as to determine its extent, and to apply the means of repair as well as to secure a clean abdomen. Another item mentioned in the case, is the one that blood flowed freely from the bullet wound, while the patient was in the erect position and ceased when he was recumbent. As the bullet passed through parts of little vascularity, this item points to the wounding of some large vessel internally (as was found), and becomes a point of value in the question of perforation. This question of perferation is no easy one to settle positively, even in the best of hands. I am inclined to agree with Dr. Waxham in the opinion that it was not the best plan to remove the patient from his home before operating, notwithstanding his bad surroundings. We must take into consideration the fact that his patient was accustomed to his surroundings, and far less likely to be harmfully affected by them than by the danger incidental to the jolting movements of removal.

"Some of the accidents of the case I am sure would have been avoided by obeying the rule of open incision in the median line. The autopsy showed considerable old blood in the cavity; this would have been found and removed. The paper states no extravasation of bowel contents was noticed; the nonexistince of such condition has doubt thrown upon it by the condition found at the autopsy The wound in the rectum would have been discovered, and the action of the bowel displayed shows an untouched perforation of its walls; probably the wound of entrance of the bullet. The exit wound is sewed up.

"The manner of closing the external incision as well as the bowel wounds should be such as to *save time* in the operation, by using the continuous catgut suture for small bowel wounds and single through and through suture of the abdominal incision. It is pure waste of time to unite the latter in layers.

"It is a matter of some pride and great pleasure to me to know that the principles enunciated by me as the results of experiments on the lower animals (especially as they are ridiculed by some) have so recently been put to a severe but successful application upon the human body. Dr. Bull, of New York, had a successful case of nine perforations, and Dr. J. B. Hamilton, of Washington, D. C., also a successful case with eleven perforations. In Dr. Hamilton's case, the only bad happening arose from the formation of a blood tumor—probably, as Dr. Hamilton says, forming from a grazed surface, the bleeding from which could not be counteracted. This was subsequently opened through the rectum and the patient recovered. But it is interesting to notice that the patient was in greater danger of his life from this mass of blood than from the wounds in the intestine after they had been closed. It shows also how necessary it is to prevent bleeding by securing, if possible, all bleeding points."

CHICAGO GYNECOLOGICAL SOCIETY.

Regular Meeting, Friday Evening, September 18th, 1885.

THE PRESIDENT, H. P. MERRIMAN, M.D., IN THE CHAIR.

DR. E. C. DUDLEY made some remarks relative to his observations in

GYNECOLOGICAL AND ABDOMINAL SURGERY IN EUROPE.

His observations were confined to the work of a few operators in England, Scotland and Heidelberg.

In Heidelberg Dr. Dudley inspected the hospital and saw evidence of considerable work in abdominal surgery. Dr. Kehrer's laboratory gave evidence of active research into gynecological bacteriology. His work bore the stamp of thoroughness and efficiency. Dr. Kehrer is a medium-sized man, frail and delicate, with a large head and small body.

A call upon Dr. Bantock, at his office, No. 18 Harley Street, W., London, resulted in a pleasant hour's conversation upon subjects pertaining to ovariotomy and hysterectomy. Patients at the Samaritan Hospital sometimes die within twenty-four hours after laparotomy, with a high temperature. This condition was called acute sepsis by certain systematic writers. Dr. Bantock thought the true pathology of the condition was unknown, and was not satisfied with the term acute sepsis. Dr. Dudley saw Dr. Bantock operate at the Samaritan Hospital. The first operation was the removal of a small, solid ovarian tumor. The remaining ovary and tube, although normal, were removed on account of a small intramural, uterine fibroid. The striking feature of the operation was great rapidity without haste. Dr. Bantock caught up the edges of the peritoneum with small compression forceps, so that these edges were drawn up towards the cutaneous edges, and were held in this position by the weight of the instrument against the abdominal surface. This manœuvre greatly facilitated the passage of the sutures. The pedicle was secured by means of silk ligature, applied in the operator's peculiar figure-of-eight turns.

In closing the wound, a needle of ovoid shape, curved on the edge, instead of on the flat, was em-

ployed. This needle combines the maximum of strength with the minimum of size. Two or three sutures were passed through at each angle of the wound. Their ends were joined by knots. An assistant, passing the index finger of each hand through the loops thus formed, made traction at each angle of the wound, in such a manner as to draw its sides into contact, and to lift the peritoneal edges nearer to the surface. The introduction of the remaining sutures was in this manner greatly facilitated. The sutures were so closely passed that no superficial stitches were required. They were made to include a very narrow margin of skin and peritoneum, and very little if any muscular tissue. Fine silk-worm gut was employed.

The ends of the sutures, on each side of the wound, were now grasped in lock forceps, which prevented them from being drawn out, or becoming tangled during the separation of the wound for the toilet of the peritoneum (which was most thorough), the entire cavity being rendered perfectly clean and dry. The lock forceps were then removed from the ends of the sutures, and the hands of the assistant substituted. The action was thus made on all the sutures, in the direction of the upper angle of the wound, and they were tied in order from below upward and cut short. This prevents tangling of the threads and otherwise facilitates tying. Antiseptics, throughout the operation, were conspicuous by their absence. The dressings were of the most simple character.

Dr. Bantock showed Dr. Dudley over the hospital, which contained a number of convalescents from hysterectomy, ovariotomy, and oöphorectomy. Dr. Bantock's exceptionally good results, in the last operation, are recognized throughout the world. His wonderful statistics in abdominal surgery are due to downright splendid operating. Dr. Meridith, at the same time, was removing a tumor in another room, under the most extreme antiseptic conditions. The famous Samaritan Hospital is an unpretentious building, seemingly a large reconstructed dwelling, in the middle of a block, with houses joining on either side, and, like great men, has a modest appearance.

It is generally supposed in America that the Woman's Hospital, in the State of New York, established by Marion Sims in 1855, was the first of its kind in the world. This is a mistake. Dr. Sims himself, in a letter to Dr. Protheroe Smith, of London, dated July, 1883, accords to that gentleman the honor of having established the first hospital specially for the treatment of the diseases of women. This hospital, founded in 1842, is now a flourishing institution in London, and is called the Hospital for Women. Its venerable founder visited Chicago a year ago. His enthusiasm for the specialty in which he has been a pioneer continues, indeed, seems to increase with advancing years. He retains his official connection with the institution, as senior physician, and is still engaged in active practice. He was among the first, against bitter opposition, to advocate anæsthesia in labor. Efforts are now being made, with great promise of success, to raise funds for the construction of a larger and more appropriate hospital building.

Dr. Dudley visited Birmingham, in response to a polite telegraphic invitation from Mr. Lawson Tait. On the train he occupied the same compartment with a sleek, well-fed, high-church London clergyman of the most conservative order, who intimated in no uncertain manner that the conservative people of London looked down upon the inhabitants of the radical city of Birmingham as a semi-barbarous community. So decided were his denunciations of the radical party in general and of Birmingham in particular, which, as the chief stronghold of radicalism, always return John Bright and Chamberlain to Parliament, that Dr. Dudley, in an apologetic manner, explained that he was only going into the jaws of the Philistine to witness an operation by a distinguished surgeon, from whom he hoped to learn something. The clergyman inquired who the surgeon was, and upon hearing the name of Lawson Tait, exclaimed: "O, I know all about him; he is just as bad as any of them;" which means that Mr. Tait is a radical in politics, as he is in surgery.

Mr. Tait's ridicule of antiseptics is well known. His rapid method of operating conveys to the casual observer the idea of haste and almost of carelessness. But closer observation very soon shows him to be one of those rare operators, where dexterity amounts almost to a sleight of hand. An ovariotomy, in his hands, does not impress the observer as a capital operation. It seems almost as trivial as opening an abscess. His methods of operating did not materially differ from those of Dr. Bantock. In closing the wound he used but one needle, threaded with a piece of long silk, introducing this as if for a continuous suture, but did not draw the thread tight. After the introduction of the needle, he left a long loop before the reintroduction. Then, after taking the last stitch, he lifted the free loops of silk on the index finger, and severed them with the scissors, thereby converting the continuous into an interrupted suture. These were tied in the ordinary way, and the wound was dressed in a manner which would be eminently acceptable to his most bitter antiseptic enemy.

During the day Mr. Tait performed ovariotomy, lumbo-colotomy, perineorrhaphy, and excised a urethro-vulvar cyst, besides attending to a large number of consultations, in one of which Dr. Dudley accompanied him to a distance of forty miles. This was for him only a moderate day's work. It is indeed evident that no other man in England controls a larger practice in abdominal surgery.

During a brief visit in Edinburgh, Dr. Dudley was pleasantly entertained by Dr. Thomas Keith, who had just returned from a consultation with Dr. Homans, in Boston, but unfortunately Dr. Keith did not operate during this time, although a large number of patients were waiting for him at the Royal Infirmary. His son, Dr. Skene Keith, kindly invited Dr. Dudley to an ovariotomy, his forty-eighth operation. Up to this time he had only lost one or two patients. His operation presented some interesting peculiarities. He used probe-pointed scissors of a peculiar pattern, instead of the director, in going down through the deeper layers of the abdominal walls. By pressing firmly against the adhesions with

a sponge, at the point of their attachment to the cyst, he literally sponged them away from the tumor. It was surprising to note the facility with which rather firm adhesions were thus broken. It is much easier to tear them from the tumor with the sponge than to tear the tumor from the adhesions. The breaking of the adhesions in this way is also much more gentle, and, in the opinion of Dr. Keith, diminishes the danger from shock. The adhesions were ligatured with fine cat-gut as fast as they were divided. In passing the ligatures a forceps, similar to the ordinary compression forceps, was used. This instrument had blades more than an inch long, of very small diameter, terminating in sharp points, so sharp that when the blades were closed they could be thrust through any soft tissue like a large needle. Grasping the ligature in the point of these blades, the tissue to be ligatured was transfixed. The ligature was then pulled through and the forceps withdrawn. The pedicle was transfixed and ligatured, with fine silk, in the same way.

The cautery, to which much of the elder Keith's success has been attributed, was not employed in this case, because the pedicle was very slender. The reason why the cautery, in the hands of other operators, has not proved a more perfect protection against hæmorrhage, becomes apparent to any one who has witnessed its application in the hands of Dr. Keith. The whole secret of his method is, first, in the powerful compression of the pedicle between the broad blades of a heavy Baker Brown clamp; second, in the prolonged application of the red-hot cautery iron, not only to the pedicle, but, after this has been burned to the level of the clamp, also to the clamp itself. In this way the clamp becomes so hot that the included portion of the pedicle is slowly and thoroughly cooked, so that when the instrument is removed, the end of the pedicle is thin and translucent, resembling a horny substance. Such a pedicle, in the experience of Dr. Keith, never gives trouble from oozing. The wound was closed with fine silk sutures which had been boiled. Ten or fifteen pieces of silk were threaded at each end with very finely, well-tempered needles nearly three inches long, which were introduced on either side from within outward. Very small margins of peritoneum and skin were included in the sutures. Dr. Keith thought it a very common fault among operators to draw the stitches too tight in tying. The long, fine needle used in closing the wound is superior. It makes a very small puncture, which never bleeds, and is so fine that it is easily pushed through by means of finger and thumb without needle forceps. In the *American Journal of Obstetrics*, April, 1880, Marion Sims had given a remarkable description of the Keith operation, which has exerted a powerful and beneficent influence upon the operation in America. Dr. Dudley could add little except the gentle handling of the adhesions with the sponge, the ligature forceps, and the peculiar long, straight needles already mentioned.

The wonderful success without antiseptics recorded by the great Scotch ovariotomist, by Dr. Bantock and by Mr. Tait, who have reduced the mortality almost to zero, must have great influence in fixing the value of Listerism so far as it relates to abdominal surgery. At any rate, incompetent operators can no longer venture with impunity upon these capital operations under the dangerous impression that, in some mysterious way, antiseptics will deprive a crude surgical performance of its greatest perils. Evidently it was not so much a question of Listerism as of removing the tumor with the least possible amount of operating, and in the shortest time consistent with careful attention to detail, and in the most gentle manner. Dr. Dudley, however, raised the pertinent question whether Listerism should be placed on trial before a court of abdominal surgeons; and whether, if found unnecessary in peritoneal surgery, it could be fair to condemn it in general. He thought such a verdict could not be sustained by the facts, but that the antiseptic principle in surgery was destined to stand. Even the most violent opponents of antiseptics agreed that perfect cleanliness was essential. He knew of no other method by which cleanliness could be rendered so nearly absolute. Nor did the seeming ability of two or three of the most dexterous operators to do without antiseptics prove that it might not be a useful aid to others. Clearly, the man who removes a tumor with the least operating and handling of the parts will require fewer preventive measures against inflammation and sepsis. Antiseptics, therefore, might be most valuable for an inexperienced operator, and, to say the least, an additional safeguard for any one. Some American operators were now having about as good results as could be shown in Great Britain, which seemed to indicate that our former high mortality in this American operation had been due in reality to bad operating, and not, as many supposed, to climatic causes.

The minor gynecology of Great Britain had apparently made but little progress since the days of Bennett and Simpson. The general impression prevails that on this side of the Atlantic we are going wild in the minor gynecological surgery. In response, we may now congratulate our English brethren that many of their leading gynecologists are already commencing to comprehend, to appreciate and to perform the American operations of perineorrhaphy, elytrorrhaphy and trachelorrhaphy, and at the same time to lay aside, in a measure, the old *porte caustique*.

Dr. H. P. Newman said that there were other reasons for the brilliant success of foreign laparotomists than those referred to by Dr. Dudley. Aside from the facility and expeditious manner of operating, acquired by large experience, a prime factor is the justifiable self-confidence of the operator and a responsive confidence inspired in the patient.

Dr. W. W. Jaggard thought that minor gynecological operations, as Dr. Dudley termed them, were less frequent in the United Kingdom and the Continent than in America. Dr. Dudley had made this general assertion, and he agreed with him. He did not, however, think the operative skill of British or Continental surgeons inferior to that of their American *confrères*. The indications for operative procedure do not exist in the United Kingdom and the Continent as in America. Laceration of the cervix and perineum are of much less frequent occurence. The

cervix uteri is usually effaced, and the external os is fully dilated before the application of the forceps. Manual dilatation is less frequently practiced. The bag of waters is not prematurely ruptured. Greater care is taken with the preservation of the perineum. In a word, obstetricians are better operators, and do not require so-called gynecological assistants.

DR. E. J. DOERING said that in 1874, he had been present at ovariotomy and other operations, performed at the Samaritan Hospital by Sir Spencer Wells. He was particularly impressed with the extreme care exercised in admitting spectators to the operations, each visitor being required to sign a statement that he had not made an autopsy or attended a case of contagious disease for the two or three days preceding. He desired to know whether these regulations were still in force, and also if Mr. Lawson Tait and Dr. Keith required similar restrictions.

The PRESIDENT asked the following questions: 1. Was any treatment given to the patients to prepare them for the operation by any of the eminent gentlemen mentioned? 2. How were the patients covered during the operation, or was the whole abdomen left bare? 3. How was the evacuation of the cyst managed? 4. Was the patient turned upon her side to accomplish this, as Dr. Thomas sometimes does?

The PRESIDENT suggested that all who desired should ask questions for further light before the general discussion began.

DR. CHRISTIAN FENGER replied to the question, raised by Dr. Dudley, that antiseptic precautions might be more important in surgery, in general, than in abdominal surgery, where it looked as though more perfect methods of operating without antisepsis gave as good results as with antisepsis, as follows:

He thought that the abdominal, or rather peritoneal cavity, in respect to the antiseptic precautions, occupies a peculiar position in surgery. The danger from absorption of the poisonous antiseptics is far greater in the abdomen than in wounds. The ability of the peritoneum to absorb serous fluid and blood before it decomposes, to encapsulate foreign substances not capable of absorption—*ex. gr.*, rubber ligature—is perhaps somewhat greater than the ability of a wound in that direction, although it may be that there is some prejudice about this, as we have not as yet used silk ligatures extensively in general surgery. As to the question, whether more perfect methods of operating without antisepsis would improve the results, or rather prevent inflammation and sepsis, he could say that outside of the peritoneum this question must as yet be answered in the negative.

In 1873, Volkman, of Halle, introduced the Lister method of dressing and operating in his surgical clinics. In his report of the work done in 1873 (*Beiträge zur Chirurgie*, 1875), the antiseptic surgery had reduced inflammatory and septic complications following excisions, amputations, fresh penetrating articular wounds, fresh open fractures, to a minimum never before dreamt of, and all this in one year. In the broad field of surgery it is not possible that Volkmann or anybody else could improve the *technique* of operating, to the extent of having the results change all of a sudden in that way. No surgeon would dare, to-day, to excise, for example, a knee-joint, without antiseptic precautions in all the minute details, even if he employed all the latest improvements in the method of operating. Abdominal surgery is the only branch of surgery in which, as yet, the heavy operating has been done without antiseptic precautions.

GYNECOLOGICAL SOCIETY OF BOSTON.

Stated Meeting, June 11, 1885.

THE PRESIDENT, H. O. MARCY, M.D., IN THE CHAIR.

DR. L. S. FOX, of Lowell, reported

TEN CASES OF ABDOMINAL SECTION.

As regards the *modus operandi*, the minimum incision should be made, unless the tumor is solid or firmly adherent. Before tapping the cyst, the patient is turned upon the right side, and the sac drawn forward as the fluid escapes. If the bulk of the tumor remains, enlarge the opening into the sac, turn their lateral edges out over the lips of the incision, pass in the hand and break up remaining cysts. The sac having been extricated, the patient is placed on her back and the pedicle secured. As a ligature, coarse, loosely-braided silk is used, as ordinary silk cuts the soft tissues and causes troublesome hæmorrhage.

The sac having been cut away, the peritoneal edges of the stump are brought together and overcast with catgut. The abdominal cavity is carefully sponged out and the bleeding point secured. The abdominal wound is thoroughly cleansed and covered with oiled silk, over which a padding of antiseptic gauze is placed. This dressing is kept in place by long strips of adhesive plaster. All silk used is previously boiled and kept in water. All water used is boiled. A solution of carbolic acid is used in spraying room and mopping floor. On day before operation patient is bathed in weak carbolized water, and vaginal douche of same liquid used. Temperature of room should be from 68° to 72° Fahr.

Dr. Fox suggested a change in Keith's drainage tube, which consisted of a constriction just below the flange to assist in holding it in position.

Cases 1, 2 and 3 were cases of multilocular cysts weighing eighteen, twenty-seven and thirty-five lbs. respectively. Recovery in each case.

Case 4.—Patient 43 years old, and extremely weak and emaciated. Pulse rapid; feet moist, œdematous and cold. Diagnosis: cystoma complicated with uterine fibroid. Tumor removed weighed twenty-seven lbs. Recovery.

Case 5.—Multilocular cyst weighing twenty lbs. was removed. Extensive adhesions. Septic peritonitis on fourth day. By use of quinine, alcohol and opium patient recovered after a lingering illness.

Case 6.—Age, twenty-seven. Always delicate and subject to glandular swellings about neck. Before she decided to submit to an operation, pregnancy supervened. She presented herself for operation when five months pregnant. Cyst crowded upward by impregnated uterus. Cyst removed weighed fifteen lbs. Miscarried on fifth day. Temperature

remained at 99° for three days, when lochia became offensive and patient had chills. Left parotid increased to an enormous size and was extremely painful. Temperature rose to 104° Fahr., and patient seemed in a critical condition. Intra-uterine douche of two and one-half per cent. was used at a temperature of 105°. All the unpleasant symptoms subsided within a week.

Case 9.—Patient 27 years old. For eight years had suffered agonizing pains through pelvis, always referable to one or both ovaries. At first these pains took the form of dysmenorrhœa, and incapacitated her for work for two weeks out of the four. During past three years pains had come on without reference to menses. Often they were accompanied by vomiting which lasted for days at a time. She was much emaciated. Latterly her sufferings could be palliated only by the use of anæsthetics. All treatment, including galvanism, failed. After consultation, removal of ovaries was allowed and eagerly accepted. Operation was performed two months ago, and thus far entire relief has been obtained. Ovaries were non-adherent and of normal size, but studded with small cysts.

Case 10.—Patient 41 years old. For two years had had menorrhagia and was unwell the greater part of the time. Diagnosis: fibroma of uterus and cystic tumor of right ovary. Operation performed and small cyst removed. Small pedunculated fibroid was removed from back of uterus. Left ovary was so firmly held by fibroid uterus that it was impossible to remove it. Recovery.

Dr. W. S. Brown thought the paper complete, and asked about the silk used. Dr. Brown prefers black silk, as it is dyed with iron and is innocuous; it can also be more readily seen in the tissues. White or yellowish silk is prepared by the use of acetate of lead.

Dr. Fox stated that the silk used by him was made by Hepner, of New York, and was so coarse and loosely braided as not to cut the tissues and cause troublesome hæmorrhage.

In response to questions from members of the Society, Dr. Fox made the following statement: Fluid accumulations in the abdomen might be mistaken for ovarian cysts by experienced men. A case once operated on by Dr. Kimball, of Lowell, illustrated this fact. Patient had had Potts' disease and spinal curvature, but had never been confined to bed. Abdomen increased in size for three years. Pulse and temperature normal. Operation for ovarian cyst was performed and a pailful of pus removed. Sac adherent to spine and could not be removed. Lived sixteen days. The autopsy showed an immense psoas abscess on left side and smaller one on right. Cases of spontaneous cure have been reported, but the tendency is toward a fatal issue, therefore Dr. Fox usually operated as soon as diagnosis was certain. Does not consider the character of the fluid before operating. He does not believe in Drysdale's corpuscles.

Dr. A. P. Clarke thought that the marked fatality of the earlier cases operated on was due to the fact that the operation was deferred until the last stages of the disease.

Dr. W. S. Brown was often in doubt as to the proper time for operation. Has a case now under observation in which the tumor is of the size of a man's head. When discovered five years ago it was of size of pigeon's egg. No unpleasant symptoms exist except prolapse of uterus. Suspects it is a tumor of broad ligament. As a rule, parovarian tumors grow slowly and ovarian tumors rapidly. Dr. Brown called attention to the fact that Sir Spencer Wells has discovered by a careful study of the history of cases subsequent to operation, that many of them die within three or four years.

DOMESTIC CORRESPONDENCE

NEW YORK LETTER.

(FROM OUR OWN CORRESPONDENT.)

First Annual Meeting of the Fifth District Branch—Electrolysis in Surgery—Fracture of the Skull with Depression—Poisoning by Aniline Oil—Causation and Treatment of Coryza—Cirrhosis of the Lungs—Surgical Practice and Surgical Anatomy—Treatment of Varicocele—The Approaching Meeting of the State Medical Association.

The first annual meeting of the Fifth District Branch of the New York State Medical Association was held at the Mansion House, Brooklyn, on the 13th of October, and despite the fact that it chanced on the stormiest day of the season, was extremely successful. There were two sessions, one in the morning and one in the afternoon, and the first scientific paper at the former was by Dr. Robert Newton, of New York, on the subject, "*Progress of Electrolysis in Surgery.*" Having spoken of the paper which he read before the American Medical Association in 1883, on "Electrolysis in Surgery; with Tabular Statistics of One Hundred Cases of Urethral Stricture," which was afterwards published in two parts, the first in the Journal of the Association, April 25, 1885, and the second in the *New England Medical Monthly* for August, 1885, he said that the object of the present paper was to relate what has been done in surgical electrolysis within the last two years, or since the date of the former paper. During this period some good work had been done by reliable men, which confirmed the reports of previous experience with the method. The only entirely new application of it appeared to be that of Dr. Craft, of Cleveland, Ohio, a member of the American Medical Association, to the treatment of hernia and hemorrhoids. The radical cure of hernia by electrolysis was new and original, and in a private letter to Dr. Newman, Dr. Craft stated that to accomplish this he had applied a positive needle electrode, properly insulated, except at the point, subcutaneously, between the external and internal rings, and allowed a sufficient galvanic current to pass behind the poles to excite adhesive inflammation; being careful not to injure the cord and to keep the needle external to the peritoneum. This resulted in a cicatricial sealing up of the inguinal canal, and, in many cases, seemingly permanently. Having described Dr. Craft's

method of treating hæmorrhoids by electrolysis, he went on to speak of the successful application of the procedure in aneurism of the aorta by Dr. Francesco Brancaccio, of Naples, in port-wine marks by Dr. W. A. Hardaway, of St. Louis, and others, for the purpose of removing superfluous hair by Dr. C. Heitzman, in uterine tumors by Dr. J. N. Freeman, of Brooklyn, Dr. J. T. Everett, of Clyde, Ohio, and Drs. Apostolé and Méniere, of Paris, in stricture of the Eustachian tube by Mons. Mercier and Garricon-Desarénes, of Paris, and in stricture of the œsophagus by Professor H'jorth, of Christiania.

In reply to a question by Prof. Wm. H. Pancoast, of Philadelphia, who was present at the meeting by special invitation from the President, Dr. Joseph C. Hutchinson, of Brooklyn, Dr. Newman stated that electrolysis acted in different ways according to the manner in which it was used. Weak currents would cause absorption, while strong ones would destroy. His own experience had been different from that of Dr. Craft as regards the comparative painfulness of the action by the two poles. Contrary to him, he had found that the positive pole caused more pain, acting, as it did, as an acid caustic, while the negative acted as an alkaline caustic. He agreed with Dr. Craft, however, as to the propriety of using the positive pole in hernia, when the object was to set up adhesive inflammation. The negative pole undoubtedly did cause absorption, and this was the one to be employed in urethral and other strictures.

Dr. Govan, of Rockland Co., read the report of a remarkable case of fracture of the skull, with depression, from a railway injury, in which the depressed bone became raised spontaneously after the patient had remained in an unconscious condition for several days. He also reported a case of poisoning by aniline oil. The patient was engaged in removing a carboy of this oil which was accidentally broken, and the fluid completely saturated his clothing. He remained in a comatose condition for several hours, and an irritating feature of the case was that from the first there was complete anæsthesia of the entire cutaneous surface. On the third day after the accident there was hæmorrhage from the bladder, and this continued for forty-eight hours.

In the discussion which followed the reading of this history, Dr. E. H. Squibb, of Brooklyn, remarked that the hæmorrhage from the bladder seemed to indicate that the aniline oil was largely contaminated with carbolic acid or other bi-products of the coal tar series. It would be interesting, he thought, to note whether the peculiar effects produced in Dr. Govan's case would result from poisoning by a specimen of perfectly pure aniline oil. The President called attention to the remarkable relief afforded by solutions of carbolic acid in burns, an application which Dr. Squibb had suggested to the profession a number of years ago; and Dr. Govan said that since he had met with this case he had resorted to the use of aniline oil as a local anæsthetic with very gratifying success. In the case of felons, it was possible to cut down to the bone without the patient experiencing any pain whatever, if the finger had previously been immersed in the oil for a short time.

Dr. Austin Flint read a paper of great interest on the subject of "*Suggestions in Regard to the Causation and Treatment of Acute Coryza*," which is to be published in the JOURNAL. Dr. Pancoast having asked in what way the active antiphlogistic treatment often used in colds, such as the production of free diaphoresis, etc., was efficient if the parasitic doctrine of the etiology of coryza were true, and whether this efficiency could be made to tally with the latter, the author of the paper replied that he did not see any inconsistency in the matter. A full dose of opium, which was always part of the antiphlogistic treatment, was very beneficial in breaking up a cold, just as it was very beneficial in the incipient stages of cholera, where the parasitic origin of the disease could now be regarded as practically established. Whether the opium was directly destructive to the parasite or not, he could not say.

Dr. Wm. McCollom, of Brooklyn, read the report of a unique case of uniformly developed cirrhosis in both lungs. The principal symptom of this very obscure case during life was progressive dyspnœa, and the only abnormal physical sign which the examination of the chest revealed was the existence of subcrepitant râles on both sides. These were attributed by Dr. J. R. Leaming, of New York, who saw the patient several times in consultation, to the presence of extensive pleuritic adhesions, both old and new. At the autopsy, the following condition of affairs was found: The kidneys were entirely normal, and the liver, with the exception of being possibly a little fatty, was also free from disease. The pericardium contained two ounces of fluid, and the right ventricle was slightly dilated. Otherwise the heart was perfectly healthy. The thoracic aorta was also normal. The lungs were of a dark gray or brown color, and floated in water. The parenchymatous structure of both lungs was very hard and dense, and creaked under the knife. There was no evidence of acute pneumonia, and no cavities were found. The only adhesions discovered were two slight ones at the apex of the right lung, and they were evidently of very long standing.

Prof. Flint stated that he had personally seen the case once, and that he remembered it perfectly. He had not been aware before that the patient was dead; but he was very glad to know the result of the autopsy. When he made the examination of the chest in consultation with Dr. McCollom he could discover nothing but the presence of a moist râle on both sides. He then felt sure that the patient had disease of the kidneys, and requested specimens of the urine. When, however, the examination of the latter gave a negative result, he felt at a loss in regard to the case, and asked that he might be permitted to see the patient again. The condition of the lungs found after death completely explained the progressive dyspnœa, and at the same time it served to illustrate the inadequacy of physical signs under certain circumstances. The remarkable point about this case was the equal development of the cirrhosis in both lungs. Almost invariably the condition was much more marked in one lung than the other; so that the difference between the two sides of the chest

was very apparent. The existence of moist râles in connection with a normal condition of the heart seemed to him to positively indicate kidney disease, and he was therefore surprised to find that the urine gave no evidence of this. On the whole, therefore, he considered it a very interesting case, and the specimens that had been presented by Dr. McCollom he believed were unique. He thought it also worth while, in this connection, to call attention to the mechanism of subcrepitant râles. One observer, as the history showed, had referred these râles in the present case to the existence of pleuritic adhesions. From the result of the autopsy, however, it was pretty evident that the subcrepitant râles were produced in the smaller bronchial tubes, and not in the pleuræ.

At the request of the President, Dr. Pancoast addressed the Association, taking for his subject, "*Some Points in Surgical Practice and Surgical Anatomy.*" He spoke first of what he called the "antiphlogistic touch of the therapeutic knife." If he saw a patient early enough, he said, this enabled him to say with almost absolute certainty that there would be no abscess. He exhibited the little knives which he had devised, which puncture, but do not cut, and which leave no scar; he said that with one of them he punctured the part in numerous places, and let the dead blood out. The method was applicable to tumors of almost any kind, as it afforded the best possible means for deep-seated blood-letting of the part. The moment a bubo, or other gathering, became hard and refused to yield to the action of local applications, he freely punctured it with this antiphlogistic knife, and occasionally he said he found that there would be a drop of pus on the point. By this method he had even cured some cases of goitre, both cystic and fibroid, or at least rendered the growth so small that it gave no further trouble. He also gave internal remedies, however, such as Donovan's solution and iodide of potassium, with the addition of cinchona or whisky, if the patient's condition required it.

The next point was one in connection with the surgical anatomy of the face, viz.: the special value of the malar bone, which was often overlooked by surgeons. It was one of the hardest bones of the whole skull, and it therefore served as a great protection; while if it could be saved, much deformity of the face could be prevented. In excision of the superior maxilla, consequently, he always made it a point to leave this bone in position; and he then proceeded to describe the operation which he had devised for this purpose. This consisted in a double curved incision, and, after turning back the soft parts, inserting a chain saw through the spheno-maxillary fissure, and so cutting through the articulation of the superior maxillary with the malar bone. In this connection he related the case of a lady with a rapidly-growing carcinoma of the face, upon whom he performed this operation, notwithstanding the fact that she was five months pregnant. In two days she had recovered from it, and she afterwards went on to full term without any further trouble.

The value of the malar bone in protecting the brain from injury was well illustrated in the case of a boy, from whose face he extracted the breech-pin of a gun which had been imbedded in it without any one's knowledge for eleven months. The gun had exploded in the lad's hands, knocking him senseless, and the breech-pin had buried itself so completely in the tissues that its presence was never suspected by the physician who attended him. This case taught us that under such circumstances we should always examine carefully for powder in the skin, and also make sure some part of the gun has not been imbedded in the face. Although this would seem like a very extraordinary case, it was not unique; similar ones having been reported by the late Dr. J. R. Barton, of Philadelphia, and by a surgeon to one of our ophthalmic hospitals.

Dr. Pancoast next gave some account of his treatment of varicocele, which he said he had seen successfully practiced in more than four hundred cases. It is very simple, and therefore in marked contrast to that so much in vogue in New York, which involved a cutting away of a portion of the scrotum. He did not think the latter a philosophical procedure, because it merely shortened the bag in which the enlarged veins are contained, and this could be more efficiently done by suspending them in a muslin bag, because the latter was indistensible, while the shortened scrotum, consisting of elastic tissues, would gradually stretch more and more, so that the trouble would eventually return. This procedure did not, therefore, go to the root of the evil. Still more complicated and serious was the operation described by Mr. Lee in the *Lancet*, of April 18, 1885, in which he cut open the scrotum and lifted out the veins of the spermatic cord. In both of these operations there was no little danger of erysipelas setting in. In his own operation the patient was cured in three or four days, instead of as many weeks. It consisted of transfixing the scrotum with a sail-maker's needle (which had a good point, but no sharp edges), and passing between the vas deferens and the veins a strong silk ligature, which, having been carried around the latter, was then brought out at the point of insertion. The ends of the ligature were finally secured tightly over a button of German silver or zinc, and the veins being thus strangulated, the ulcerative process went on rapidly.

The other subjects touched upon by Dr. Pancoast were the treatment of the urethral stricture by his urethratome, modeled upon Mr. Symes' instrument, with the cutting followed up by a regular and prolonged course of dilatation, in connection with which he exhibited a metallic catheter-bougie, devised by himself, which had an olive-shaped extremity for the purpose of preventing puckering of the mucous membrane; the advantages of black silk sutures, which were the strongest made, and, being dyed with iron, possessed marked antiseptic properties; the treatment of ununited fractures of the fore-arm and leg, and of fractures of the neck of the femur in the aged; the treatment of incurvation of the penis by an operation devised by his father, in which a V-shaped piece was cut from the cavernous bodies a short distance behind the glans; and the utility of

entirely extirpating chancres with the knife. He also exhibited specimens showing the results of exsections of the shoulder and hip-joints, with the development of remarkable reparative processes.

It was decided that the next special meeting for scientific purposes of the Fifth District Branch should be held at Yonkers, on the second Tuesday of March, 1886. The prospects for the second annual meeting of the parent Association, to be held in this city in November, are unusually brilliant, and with four days for the purpose, upon three of which there will be three sessions each, there can be little doubt that much good work will be accomplished. P. B. P.

INTERNATIONAL MEDICAL CONGRESS.

TO THE EDITOR OF THE JOURNAL.

Dear Sir:—Dr. R. A. Kinloch, of Charleston, S. C., occupies nearly three pages of the *Medical News* in an effort to prove that he alone was right and that all the other members of the Committee of Arrangements, who were present in New York on September 3d, were utterly wrong. Dr. Kinloch frankly acknowledges that he did not approve of the action of the American Medical Association in creating the enlarged Committee, and states that he only accepted a position on the Committee because he "recognized the obligation to serve the Association and indulged the hope of sustaining a spirit of harmony." This quotation looks well in print, but its beauty is marred by the fact that the conduct of its author was not in accord with its spirit. If his course of action as a member of the Committee implied any obligation on his part, it apparently implied an obligation to serve a coterie of personal friends regardless of the rights or wishes of the American Medical Association, and so far from endeavoring to sustain a spirit of harmony, he persistently endeavored to obstruct the proceedings of the Committee by frittering away valuable time with trivial objections. The members of the Committee, however, understood the peculiar position in which Dr. Kinloch had been placed, and listened to him with attention, and then voted and acted for the best interests of the American medical profession.

Dr. Kinloch complains that a letter which he forwarded to the temporary Secretary was not read before the meeting of the Committee in Chicago, or embodied in the report which was recently published. I had received nearly two hundred letters at that time, some of which were similar in tenor to Dr. Kinloch's, but the great majority expressed approval of the action of the Association. To have read them all would have occupied the whole day. The Committee therefore directed me to read the one which had been received from Dr. Austin Flint, Sr., the eminent President of the Congress.

Dr. Kinloch's chief grievance, however, appears to be that the Committee exercised its right of filling a number of the vacancies which had been made in several of the important offices of the Congress by the resignation of a number of those who had been previously appointed. According to Dr. Kinloch, many of those resignations were merely tentative in character, and not intended to be *bona fide*, and the appointment of new men to the important places was a manifestation of vindictiveness on the part of the Committee which Dr. Kinloch could not condone. To use Dr. Kinloch's own words: "The work of filling the so-called vacancies in the most important offices had continued without any question as to the acceptance of resignations. The spirit of vindictiveness (I regret to have to use the term) under the presumed offence given by the parties who had proposed to withdraw, seemed to me to be irrepressible; so I could not consent to occupy the position which had been assigned me."

I was informed several months ago that many of the published resignations had been forwarded in a half-hearted manner, and that many more had been procured by earnest personal solicitation, but that none of the distinguished resigners intended to personally refrain from participation in the International Medical Congress. Their aim was to compel the Association to reinstate the Original Committee with full power to reinstate themselves and their New Code friends in office, to give four positions to one, five to another, six to another, and so on to the end of the chapter. I was inclined to doubt the correctness of this at first, but Dr. Kinloch has corroborated it by practically admitting that many of the resignations were intended only for dramatic effect. Dr. Kinloch and his friends understand by this time, however, that the Committee of Arrangements appointed by the American Medical Association could neither be cajoled nor intimidated. That Committee was created for a special purpose—to provide a preliminary organization for the Congress. Its work has been performed without fear and without malice. The general officers of the Congress and the officers of the various Sections have been appointed and have organized an Executive Committee, who will now take charge of all minor details. Some further vacancies may occur by death or otherwise, but they will be filled by competent and thoroughly representative men who are in accord with the medical profession of the whole country.

JOHN V. SHOEMAKER, M.D.

Philadelphia, Oct. 20, 1885.

THE AXIS-TRACTION FORCEPS.

TO THE EDITOR OF THE JOURNAL:

Dear Sir:—I must confess some surprise in reading the criticism appended to my "Correction" published in Oct. 17th No. of this journal. In the first place, if any one is disingenuous it is certainly the writer of this criticism, who persists in saying, that I did not give credit to Dr. Felsenreich, in spite of the fact, that I have distinctly published and publicly stated, the disputed forceps to be the Alexander Simpson's, with Tarnier's axis-traction rods attached by Dr. Felsenreich's buttonhole joint! In the second place, the writer stated that the disputed forceps "is merely a modification of Felsenreich adaptation of Alexander Simpson's axis-traction forceps," and then in reference to Dr. Felsenreich's instrument contradicts himself by saying: "The forceps to which the

axis-traction rods were attached, was the *Wiener Schulzange*, the original model of the Sir James Y. Simpson instrument."

Hence, for the benefit of the writer, I will merely reiterate what I have already so often declared and published, that I have now adopted the Alexander Simpson blades.

Finally, *I* have entered into communication with Dr. Felsenreich on the subject," and moreover, am happy to state, that in addition to this, I have sent him copies of *all* the published articles, with the urgent request that he inform me at once of his opinion, which I shall be pleased to publish if necessary.

Respectfully, L. E. NEALE. M.D.

Baltimore, Oct. 20th, 1885.

NECROLOGY.

SAMUEL GLASGOW ARMOR, M.D., LL.D.

Dr. Samuel G. Armor died at his home in Brooklyn, on October 27, in the sixty-eighth year of his age. He was born in Washington Co., Pa., of Scotch-Irish parentage, on January 29, 1818, and his parents removed to Ohio soon afterwards. He received his academic education at Franklin College, Ohio, and in 1872 this institution conferred upon him the degree of LL.D.

He studied medicine with Dr. James T. Irvine, of Millarsburg, O., and graduated from the Missouri Medical College, of St. Louis, in 1844. Soon after graduating in medicine he settled in Rockford, Ill., and in 1847 received an invitation to deliver a special course of lectures on physiology in Rush Medical college, of Chicago. In the following year he was called to the Chair of Physiology and Pathology in Rush Medical College, but declined it because he had just accepted the same position in the Medical Department of the University of Iowa, at Keokuk. Subsequently, however, he resigned this position to take the Chair of Natural Science in the University of Cleveland. In July, 1853, he was awarded a prize by the Ohio State Medical Society for his essay on the "Zymotic Theory of the Essential Fevers." During the same year he accepted the Chair of Physiology and Pathology in the Medical College of Ohio, having resigned his position in the University of Cleveland.

In 1834 he was transferred to the Chair of Pathology and Practice of Medicine. About two years afterwards he resigned this position, and removed to Dayton, O., though having accepted the Chair of Pathology and Practice of Medicine in the Medical College of Missouri, of which he was an alumnus. In 1861 he removed to Detroit, having accepted the Chair of the Institutes of Medicine and Materia Medica in the University of Michigan. Here he remained until 1866, when he removed to Brooklyn, having accepted the Chair of Therapeutics, Materia Medica, and General Pathology in the Long Island College Hospital. In 1867, Dr Austin Flint having resigned the Chair of Practice of Medicine and Clinical Medicine, Dr. Armor was transferred to this position, which he retained until his death.

ASSOCIATION ITEMS.

INFORMATION OF IMPORTANCE TO ALL MEMBERS OF THE AMERICAN MEDICAL ASSOCIATION.

MEMBERSHIP.—Every one who attends an annual meeting of the Association as a delegate pays at that time five dollars, and thenceforward becomes a Permanent Member. He continues as such as long as he remains in good standing in the body from which he was originally sent as a delegate. As a Permanent Member, he must pay *Five Dollars Annually*, when notified by the Treasurer, whether he attends the meetings of the Association or not. Payment of annual dues entitles him to receive the weekly JOURNAL of the Association for one year.

MEMBERS BY APPLICATION are such as have not become Permanent Members in the manner above indicated, but apply to the Treasurer for membership, forwarding at the same time to him five dollars and the certificate of the President and Secretary of their State or local society, that they are in good standing in such society. They pay five dollars annually thereafter, when notified by the Treasurer. Members by application can join the Association at any time, and they receive regularly the weekly JOURNAL.

WHEN DUES ARE PAYABLE.—The annual dues from Permanent Members are payable to the Treasurer at the time of the annual meeting of the Association, or immediately thereafter. The payment entitles the member to receive the JOURNAL for one year from the following July. Payment for 1885, for example, entitles the member to the JOURNAL from July, 1885, to June, 1886, inclusive.

As some of the members have not yet forwarded to the Treasurer their dues for 1885, they are urgently requested to do so at an early day. Having entered upon another year of membership, they are morally and legally responsible to the Association for the payment of their annual dues, having already received for three months of the new year—1885—the JOURNAL of the Association.

SUBSCRIPTIONS TO THE JOURNAL, from those who are not members of the Association, should be forwarded to the office of publication, 65 Randolph Street, Chicago, and not to the Treasurer; but *all payments of annual dues must be forwarded to the Treasurer, Lock Box 1274, Philadelphia.*

DEATHS.—When a member of the Association, who is in regular receipt of the JOURNAL, dies, his family or other representatives are requested to inform the Treasurer at once of the fact.

PAYMENT OF DUES FOR PREVIOUS YEARS.—As a few members of the Association are still in arrears for payment of dues for 1883 and 1884, they are requested to forward at once to the Treasurer the amounts for which they are indebted to the Association.

TRANSACTIONS OF THE ASSOCIATION.—These annual volumes, thirty-three in number, to 1882 inclusive, may still be obtained, with few exceptions, from the Treasurer, at reduced prices. The Index to these volumes will be forwarded on receipt of *One Dollar*. An opportunity is thus afforded to complete

sets of these valuable publications, or to obtain important papers and works which are daily becoming scarce.

RICHARD J. DUNGLISON, M.D., *Treasurer.*
Lock Box 1274, Philadelphia, Pa.

NINTH INTERNATIONAL MEDICAL CONGRESS, WASHINGTON, D. C., 1887.

[The following are some of the more important Rules adopted relating to the preliminary organization of the Congress.—ED.]

1. The Congress shall consist of members of the regular profession of medicine, who shall have inscribed their names on the register and shall have taken out their tickets of admission; and of such other scientific men as the Executive Committee of the Congress may see fit to admit.

2. The dues for members of the Congress shall be ten dollars each for members residing in the United States.

There shall be no dues for members residing in foreign countries.

Each member of the Congress shall be entitled to receive a copy of the "Transactions" for 1887.

3. The Congress shall be divided as follows, into seventeen Sections:

I. General Medicine.
II. General Surgery.
III. Military and Naval Surgery.
IV. Obstetrics.
V. Gynæcology.
VI. Therapeutics and Materia Medica.
VII. Anatomy.
VIII. Physiology.
IX. Pathology.
X. Diseases of Children.
XI. Ophthalmology.
XII. Otology and Laryngology.
XIII. Dermatology and Syphilis.
XIV. Public and International Hygiene.
XV. Collective Investigation, Nomenclature, Vital Statistics, and Climatology.
XVI. Psychological Medicine and Diseases of the Nervous System.
XVII. Dental and Oral Surgery.

4. The General Meetings of the Congress shall be for the transaction of business and for addresses and communications of general scientific interest.

* * * * * * * *

8. The official languages of the Congress shall be English, French, and German.

In the meetings of the Sections, no member shall be allowed to speak for more than ten minutes, with the exceptions of the readers of papers and those who introduce subjects for discussion, who may each occupy twenty minutes.

9. The rules and programmes shall be published in English, French, and German.

Each paper and address shall be printed in the "Transactions" in the language in which it was presented, and preliminary abstracts of papers and addresses also shall be printed, each in the language in which it is to be delivered.

All discussions shall be printed in English.

10. The President of the Congress, the Secretary-General, the Treasurer, the Chairman of the Finance Committee, and the Presidents of the Sections, shall together constitute an Executive Committee of the Congress, which Committee shall direct the business of the Congress, shall authorize all expenditures for the immediate purposes of the Congress, shall supervise and audit the accounts of the Treasurer, and shall fill all vacancies in the offices of the Congress and of the Sections. This Committee shall have power to add to its membership, but the total number of members shall not exceed thirty. A number equal to one-third of the members of the Committee shall constitute a quorum for the transaction of business.

11. The Officers of the Congress shall be a President, Vice-Presidents, a Secretary-General, four Associate Secretaries, one of whom shall be the French Secretary, and one of whom shall be the German Secretary, a Treasurer, and the Chairman of the Finance Committee.

12. The officers of each Section shall be a President, Vice-Presidents, Secretaries, and a Council.

13. The officers of the Congress and the officers of the Sections shall be nominated to the Congress at the opening of its first session.

MISCELLANEOUS.

WASHINGTON OBSTETRICAL AND GYNECOLOGICAL SOCIETY.—At the annual meeting of this Society, held on October 16, 1885, the following officers were elected for the ensuing year: *President*, A. F. A. King, M.D.; *Vice-Presidents*, W. W. Johnston, M.D., J. Taber Johnson, M.D.; *Recording Secretary*, C. H. A. Kleinschmidt, M.D.; *Corresponding Secretary*, S. S. Adams, M.D.; *Treasurer*, G. B. Harrison, M.D.

OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT, U. S. ARMY, FROM OCTOBER 17, 1885, TO OCTOBER 23, 1885.

Col. T. A. McParlin, Surgeon, directed to wait further orders in New York City. (Letter from A. G. O., Oct. 19, 1885.)

Lieut.-Col. E. P. Vollum, Surgeon, assigned to duty as attending surgeon headquarters Dept. Platte, Omaha, Neb., relieving Asst. Surgeon Wm. C. Shannon. (S. O. 103, Dept. Platte, Oct. 15, 1885.)

Major Anthony Heger, Surgeon, directed, in addition to his present duties as member of Army Medical Examining Board, now in session in New York City, to perform the duties of attending surgeon in that city. (S. O. 240, A. G. O., Oct. 19, 1885.)

Major Joseph C. Bailey, Surgeon, granted leave of absence for twenty days. (S. O. 225, Dept. East, Oct. 19, 1885.

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF MEDICAL OFFICERS OF THE U. S. MARINE HOSPITAL SERVICE FOR THE TWO WEEKS ENDED OCTOBER 24, 1885.

Long, W. H., Surgeon, to proceed to Detroit, Mich., and assume charge of the Service. Oct. 23, 1885.

Austin, H. W. W., Surgeon, to proceed to Albany, N. Y., on special duty. Oct. 14, 1885.

Williams, L. L., Asst. Surgeon, relieved from duty at Norfolk, Va.; to proceed to Washington, D. C., for temporary duty. Oct. 20, 1885.